**Danish Ministry of Foreign Affairs** **Danida**

**Final**

# Sector Programme Support Document

# Danish Support to the Environment Sector

# Egypt



**Ref. No. 104. Egypten. 806** **March 2000**

# Table of Contents

## Tables



## Figures

## Abbreviations

| | |
|---|---|
| ACI | Achieving (Cost Effective) Compliance in Industry |
| AGCCD | Association of Garbage Collectors for Community Development |
| ARM | Annual Review Meeting |
| CAOA | Central Agency for Administration and Organisation |
| CAFE | Community Action for the Environment |
| CAPMAS | Central Agency for Public Mobilisation and Statistics |
| CBA | Cost/Benefit Analysis |
| CDA | Community Development Association |
| CDBA | Central Department of Branches Affairs |
| CDE | Capacity Development in the Environment |
| CDECA | Central Department of Environmental Communication and Awareness |
| CEDAW | Convention on Elimination of All Forms Discrimination Against Women |
| CEM | Communication for Environmental Management |
| CEO | Chief Executive Officer |
| CIDA | Canadian International Development Agency |
| CRC | Convention on the Rights of the Child |
| CSC | Component Steering Committee |
| CT | Cleaner Technology |
| CTA | Chief Technical Adviser |
| CUH | Cairo University Hospitals |
| CZM | Coastal Zone Management |
| Danida | Danish International Development Assistance |
| DEM | Decentralised Environmental Management |
| DEPA | Danish Environmental Protection Agency |
| DFID | Department for International Development (UK) |
| DKK | Danish Kroner |
| EAO | Environmental Affairs Office |
| EEAA | Egyptian Environmental Affairs Agency |
| EEAP | Egyptian Environmental Action Plan of 1992. |
| EEIS | Egyptian Environmental Information System |
| EETP | Egyptian Environmental Training Programme |
| EETU | Egyptian Environmental Training Unit |
| EGP | Egyptian Pounds |
| EA | Environmental Assessment |
| EIB | European Investment Bank |
| EIC | Interim Environmental Information Centre |
| EIMP | Environmental Information and Monitoring Programme |
| EMG | Environmental Management in the Governorates |
| EMN | Environmental Monitoring Network |
| EMS | Environmental Management System |
| EMU | Environmental Management Unit |
| ENGO | Environmental Non Governmental Organisation |
| EPAP | Egypt Pollution Abatement Project |
| EPF | Environmental Protection Fund |
| EPL | Environmental Protection Law |
| EQI | Environmental Quality International |
| ERSAP | Economic Reform and Structural Adjustment Programme |
| ESPS | Environmental Sector Programme Support |
| EU | European Union |
| Feddan | Egyptian area unit 1 feddan = 0.4 hectare |
| FEI | Federation of Egyptian Industries |
| FGM | Female Genital Mutilation |
| FINNIDA | Finnish International Development Agency |
| GCA | Greater Cairo Area |
| GDP | Gross Domestic Product |
| GEAP | Governorate Environmental Action Plan |
| GIS | Geographic Information System |
| GNP | Gross National Product |
| GOE | Government of Egypt |
| GOEA | General Offices for Environmental Affairs |
| GOFI | Government Organisation for Industrialization |
| HC | Hazardous Chemicals |
| HCW | Health Care Waste |

| | |
|---|---|
| HDI | Human Development Index |
| HRD | Human Resources Development |
| HRI | Hydraulic Research Institute |
| IDA | International Development Association |
| ILO | International Labour Organisation |
| JICA | Japan International Cooperation Agency |
| KFW | Kreditanstalt für Wiederaufbau |
| LCD | Least Developed Countries |
| LE | Egyptian Pounds |
| LFA | Logical Framework Approach |
| MALR | Ministry of Agriculture and Land Reclamation |
| METAP | The Mediterranean Technical Assistance Program |
| MFA | Ministry of Foreign Affairs |
| MHUCC | Ministry of Housing, Utilities and Urban Communities |
| MIMW | Ministry of Industry and Mineral Wealth |
| MOEA | Ministry of Environmental Affairs |
| MOHP | Ministry of Health and Population |
| MPWWR | Ministry of Public Works and Water Resources (former Ministry of Irrigation) |
| MSEA | Minister of State for Environmental Affairs |
| MSW | Municipal Solid Waste |
| NEAP | National Environmental Action Plan |
| NGO | Non Governmental Organisation |
| NICZM | National Interministerial Coastal Zone Management Committee |
| NOSCP | National Oil Spill Contingency Plan |
| NWRC | The National Water Research Centre |
| ODA | Official Development Assistance |
| OECD | Organisation for Economic Cooperation and Development |
| OSP | Organisation Support Programme |
| PSU | Programme Support Unit |
| QA/QC | Quality assurance/quality control |
| RBO | Regional Branch Office of EEAA |
| RDE | Royal Danish Embassy |
| SEAM | Support for Environmental Assessment and Management |
| SEM | Strategic Environmental Management |
| SFD | Social Fund for Development |
| SPA | Shore Protection Agency |
| SPS | Sector Programme Support |
| SPSD | Sector Programme Support Document |
| TA | Technical Assistance |
| TEF | Tourism and Environment Fund |
| TCOE | Technical Cooperation Office for the Environment |
| TOR | Terms of Reference |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| USD | US Dollars |
| WB | World Bank |
| WHO | World Health Organisation |

**Terms used**

Danida advisor: Advisor recruited through Danida personnel assistance.

International technical assistance/consultant: Consultant recruited through Danida tender procedures.

Local technical assistance/consultant: Consultant recruited directly by the programme or by Danida in Copenhagen as part of a consultancy contract (See above)

**Exchange rates (January 2000)**

| | |
|---|---|
| Egyptian Pound (LE) 342,70 | = USD 100,00 |
| Danish Kroner (DKK) 7,44 | = USD 1,00 |

**Cover Page**

| | |
|---|---|
| Country: | Egypt |
| Sector: | Environment |
| Title: | Environment Sector Programme Support |
| Cooperating Agencies: | Egyptian Environmental Affairs Agency (EEAA) under the Ministry of State for Environmental Affairs |
| Duration: | 6 years |
| Starting Date: | 1. January 2001 |
| Budget New Components: | DKK 367,00 million |
| Budget incl. Ongoing projects | DKK 432,09 million |

**Description:**

*Development objective*
The development objective of the ESPS is to contribute to the efforts of the Egyptian Government within the environmental sector to improve environmental conditions, developing environmental management capacity of institutions, and by providing frameworks for compliance with environmental regulations. This will be achieved through effective implementation of environmental management and improvement activities at the local level; by supporting the Egyptian Environmental Affairs Agency's (EEAAs) strategy for regionalisation of its services and functions; by institutional support to two selected governorates, i.e. the Governorates of Aswan and Beni Suef, and; by a programme, which assists the Egyptian industry to improve compliance with environmental regulation through cleaner production.

Assistance under the ESPS will be provided through the following programme components:

*SPS Components:*

| | | |
|---|---|---|
| New: | DEM | Decentralised Environmental Management |
| | CEM | Communication in Environmental Management |
| | EMG | Environmental Management in the Governorates |
| | ACI | Achieving Compliance in Industry |
| | KIMA | (Phase II and III) |
| Ongoing: | EIMP | Environmental Information and Monitoring Programme |
| | SPA | Technical assistance to Shore Protection Agency |
| | KIMA | Fertiliser and Ferrosilicon Plant (Phase I) |

*Immediate objectives*
The immediate objectives of the SPS are:

- EEAA capacity for decentralised environmental management strengthened.
- Selected Regional Branches Offices of the EEAA able to fulfil their mandates according to Law #4/94.
- Dissemination of environmental information to support the priority environmental strategies of the EEAA, Environmental Management Units of the Governorates (EMUs) and other partner stakeholders.
- Awareness of environmental issues and capacity of decision-makers, implementers in the EEAA, governorates, and the industrial sectors enhanced.
- The EMUs in Aswan and Beni Suef enabled to carry out their mandated environmental management functions.
- Governmental Environmental Action Plan (GEAP) process functioning in Beni Suef and Aswan that involves people at the community level in identifying and rectifying local environmental problems through community based and replicable projects
- Awareness and usage of cleaner production in at least three sectors of the Egyptian industry.
- Egyptian technical consultants promote and implement cleaner production in the industry.
- Environmental Compliance Office at FEI serves as a link between the industry, the Egyptian technical consultants, EEAA, and financial facilities.

*Poverty alleviation and other cross-cutting issues*
The SPS will only in some components target poverty alleviation directly. However, enhanced ability at local level to deliver environmental management services in general and to implement environmental improvement projects and activities, which are based on direct community involvement and participatory planning processes, is likely to have a positive, long-term impact on the quality of life of poor people. The components' influence on gender disparity will also be indirect. To increase the potential for direct benefits, the SPS implementation strategy will monitor poverty and gender indicators in order to be able to address these issues during implementation. The SPS will support improved governance by strengthening the ongoing efforts to decentralise environmental management in Egypt and by facilitating greater openness in the administration, i.a. through involvement of community groups in planning processes, collection, preparation and dissemination of environmental in formation etc.

*Environmental Issues*
The SPS focuses on Capacity Development in the Environment (CDE) and small-scale demonstration projects. Most of the activities (for example training, awareness raising, procurement of office equipment etc.) will not involve any physical disturbance of the environment that might merit an environmental impact assessment. Although all demonstration projects to be implemented as part of the SPS will be designed to secure an overall improvement in the environment, they will still be subject to Environmental Assessment if potentially significant adverse effects could result from preparation activities or during implementation. This will be monitored through an Environmental Management Plan.

*Budget*
The total budget of the SPS programme, including the already committed on-going projects, is DKK 432,1 million spread over the period 2001 to 2006. The total for the new SPS components is budgeted at DKK 367,0 million. Overall, there is some DKK 32 million of unallocated funds for use during the sector programme. It should be noted that the above budget figures excludes the cost of directly funded Danida advisors.

**Signatures:**

# Executive Summary

## Context

Denmark is the third largest contributor of grant funding to Egypt and the fifth largest in terms of bilateral ODA, providing around DKK 215 million (USD 31 million) in 1998, of which the environment sector received some 20%. A variety of environmental projects and activities were funded from this, mostly aimed at developing the capacity of the Egyptian Environmental Affairs Agency (EEAA).

In 1997 it was agreed during the annual consultations between the two governments that future environmental co-operation between Denmark and Egypt would be structured as Sector Programme Support (SPS). This approach was introduced by Danida in 1994, and it aims to ensure that Danish support is closely matched to the sectoral policies and ongoing initiatives of the countries of cooperation. Following the preparations, the SPS was appraised in January 2000.

## Socio-Economic Situation

Egypt is a democratic country. However, decision-making power is heavily centralised and state-of-emergency laws have been in force since 1981 due to political violence. The economy has been growing fairly rapidly since the late 1970s and in 1998 national per capita income (GNP) reached USD1,290. This puts Egypt roughly on the threshold of becoming a middle income country. There remains, however, considerable regional variation, and areas of severe poverty can be found in most parts of the country, particularly in Upper Egypt . Overall, about 20% of households still live in poverty, while 7% (mostly women) live in extreme poverty.

Economic success has been fostered by structural reform towards a more market-oriented economic system, including trade liberalisation, privatisation and institutional strengthening. The government is expected to press ahead with these reforms in coming years and, in particular, to encourage key financial institutions to operate transparently in line with concepts of good governance.

## Environment

The protection of the water resources is the most critical environmental issue in Egypt. Industry, municipal waste water and agrochemicals pollutes the Nile, which supplies about 97% of all fresh water. Moreover, although around 90% of the urban and 86% of the rural population have access to water, its quality is variable. Other significant issues include:

- inadequate wastewater treatment plant capacity;
- deteriorating wetland habitat, endangering wildlife and fisheries;
- air pollution damaging public health and cultural heritage;
- rapid urbanisation engendering slums and squatter settlements;
- inadequate handling and disposal of domestic and hazardous wastes;
- pollution of coastal waters.

## Environmental Policy and Management

The environmental policy of the Government of Egypt is to implement its 1994 law for the protection of the environment by developing institutional and legislative frameworks at national and local level. A summary of priorities was compiled in 1998 in seven policy directives. These policy directives emphasise:

- partnerships between the different segments of society at national level
- partnerships at the bilateral, regional and global levels
- the implementation of Law 4/1994 for the protection of the environment
- development and upgrading of natural protectorates
- institutional capacity development in EEAA and the 26 governorates
- sustainable environmental management systems
- the use of market-based financial instruments for environmental protection

At the highest level, environmental matters come under the purview of the Minister of State for Environmental Affairs (MSEA), whose executive arm is EEAA. EEAA has responsibility for setting national policy and co-ordinating environmental management activities, as well as for all aspects of the implementation and monitoring of environmental laws.

At the regional level, EEAA is in the process of establishing Regional Branch Offices (RBOs), as part of its longer-term strategy of decentralisation. In the first instance, each RBO will support 3-4 governorates in their environmental management efforts.

Environmental management responsibilities in the governorates should be carried out by an Environmental Management Units (EMU) situated in the governor's office and fully funded by the governorate.

EEAA is also responsible for co-ordinating the activities of as many as 15 line ministries that share or exercise environmental management responsibilities, and also for encouraging the NGOs that are beginning to play an active role in the environmental field. Currently, some 70 of these NGOs have been involved in such activities as public awareness and education, environmental protection activities and provision of environmental services, such as solid waste collection and disposal.

## Danish Policy and Objectives

The overall objectives of Denmark's co-operation with Egypt comprise: the promotion of economically and ecologically sustainable development; the improvement of the living conditions for the poorest sections of the society; and support to the development of democratic institutions in the country.

The strategy for the environmental SPS in Egypt, as for Danish development assistance in any country, emphasizes poverty alleviation as a fundamental principle. The poverty reduction strategy can be summarized as:

- the promotion of sustainable and socially balanced economic growth. This would include the use of redistribution policies as an integral part of economic policy;

- the development of the social sectors including health and education. These would be seen as prerequisites for the development of human resources; and
- the promotion of popular participation in the development process and the development of a society based on the rule of law and good governance. These would be seen as prerequisites for stability and economic, political and social progress.

Danida also aims for visible achievements from its assistance that are commensurate with the resources available for the SPS. Programme activities will therefore be concentrated mainly within clearly defined geographic areas (the two governorates: Aswan and Beni Suef), on two Regional Branch Offices (RBOs) of the EEAA, and on a small number of priority industrial sectors.

**Strategy for the SPS**

The strategic context of SPS development required a programme that both met Danidas development objectives and was fully consistent with Egypt's environmental policy, priorities and ongoing initiatives. Environmental management at the decentralised level allows a focus on poverty reduction and encourages the direct involvement of a diverse range of partners in programme activities. Furthermore, decentralisation is potentially part of good governance, since it entails shifting decision-making closer to the people most directly affected, plus raising awareness and capacity for self-help in those local communities that need it most.

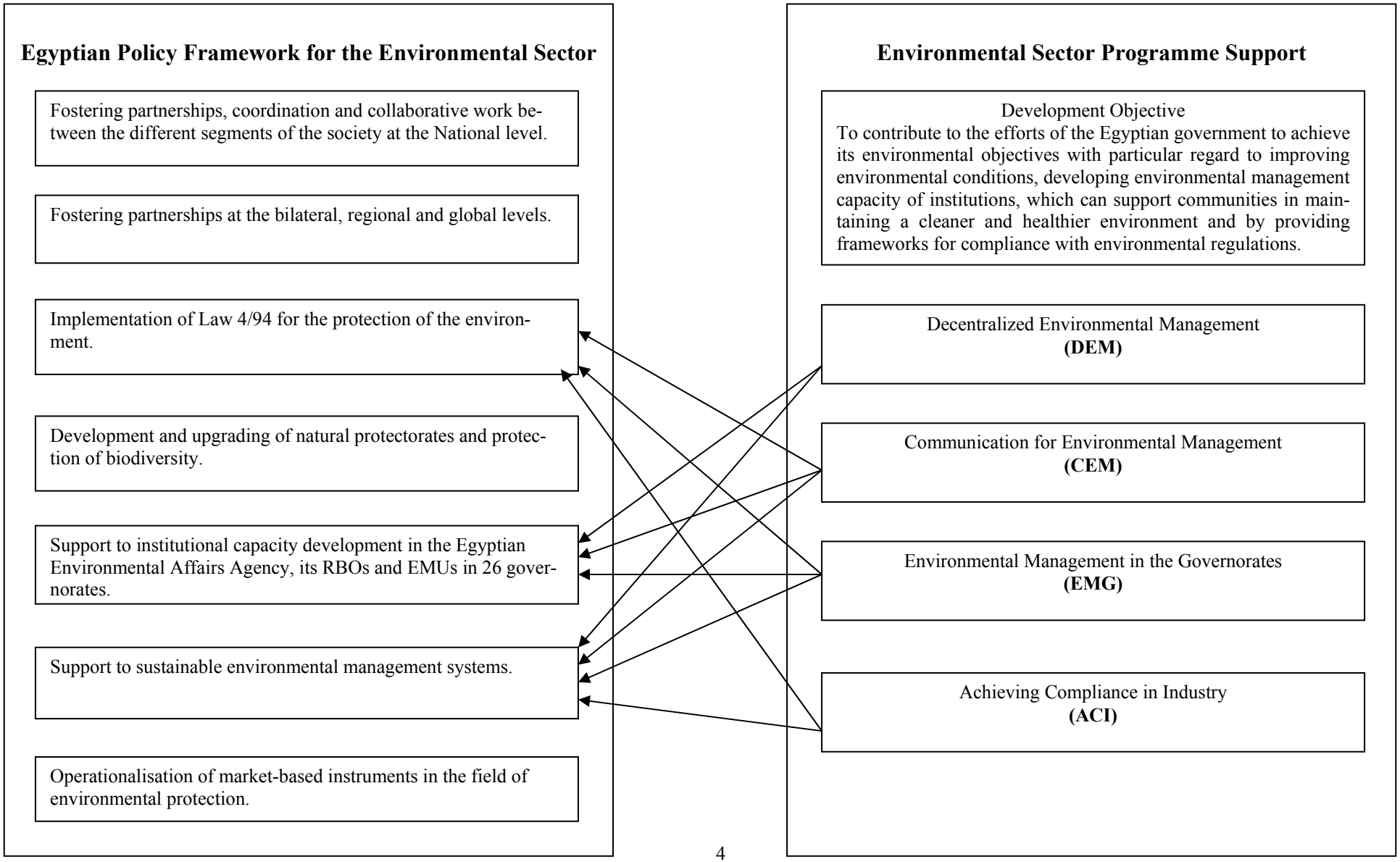
The overall objective supporting decentralisation of environmental management is:

***To contribute to the efforts of the Egyptian government to achieve its environmental objectives with particular regard to improving environmental conditions, developing environmental management capacity of institutions which can support communities in maintaining a cleaner and healthier environment and by providing frameworks for compliance with environmental regulations.***

This will be achieved by a capacity development approach to environmental management and improvement activities at the local level; by support at the centre (of the EEAAs regional strategy); and, by supporting the governorates of Aswan and Beni Suef in institution building, environmental remediation at "black spots", knowledge creation, awareness raising and technology transfer.

Assistance under the SPS will be provided through a number of programme components each of which targets a specific element of a clearly expressed GoE priority.

**Figure 0.1 Egyptian Policy Framework for the Environmental Sector Environmental SPS**



Each Component has detailed arrangements to promote sustainability, all of which derive from a set of principles including the following:

- long-term technical assistance will develop capacity at the recipient institution, such that there is no further need for it at the end of the programme;
- international short-term technical assistance will always be matched by locally hired consultants with the aim of developing local private sector capacity to provide these services;
- equipment will only be provided that can be locally maintained and operated, within the likely future resources of the local owners;
- activities will be supported that can eventually be financed without the need for external funds.

Showcase projects are a key part of every component. To help to extend ownership many of these will be carried out by the authorities in participating governorates or civil society.

Besides the components shown in figure (1), the SPS includes the following components, which have been prepared as discrete projects:

| Component | Objective | Partner(s) |
|---|---|---|
| Monitoring and managing shore protection activities (SPA II) | *Continuing and completing Danidas ongoing SPA project.* | Shore Protection Authority, Coastal Research Institute and Hydraulic Research Institute |
| KIMA fertiliser and ferro- silicon factory | *Continuing and completing Danidas KIMA factory environmental clean-up project* | Kima Holding Company and factory management |
| Environmental Information and Monitoring systems (EIMP) | *Completing Danidas commitments to the EIMP project* | EEAA Department of Environmental Quality |

**Management**

Three components of the SPS are anchored within EEAA. For the remaining Components, however, partner organisations were identified whose basic approach, interests and activities matched those required to implement the Component. This has the added advantage of developing capacity outside the central agency in line with the approach of the entire SPS.

Director of the SPS will be a senior staff member of EEAA, supported by a Danida-recruited Chief Technical Advisor (CTA). The SPS will be coordinated and administered by a Programme Support Unit (PSU) that will be situated in EEAA.

The management and organisation will be structured around an SPS Co-ordination Committee comprising members of EEAA Board of Directors and representatives of each partner organisation, including the RDE; and Component steering committees, composed of the institutions, organisations and stakeholders receiving support.

## Budget

The total value of the SPS programme, including the on-going commitments, is DKK 432,1 million spread over the period 2001 to 2006. The following table shows the overall budget (excluding the cost of Danida-recruited advisers).

**Overall Budget for SPS (DKK million)**

| **Item** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **TOTAL** |
|---|---|---|---|---|---|---|---|
| DEM-component | 2,02 | 4,19 | 5,09 | 3,69 | 3,47 | 2,28 | 20,74 |
| CEM-component | 3,08 | 3,79 | 3,19 | 3,19 | 3,19 | 3,19 | 19,64 |
| EMG-component | 10,34 | 13,67 | 15,15 | 19,15 | 21,52 | 21,52 | 101,36 |
| ACI-component | 6,63 | 7,51 | 7,37 | 23,55 | 25,14 | 30,41 | 100,61 |
| KIMA | 15,00 | 22,00 | 20,00 | 4,06 | | | 61,06 |
| EIMP | 2,31 | 2,70 | 0,80 | 0,80 | 0,40 | | 7,01 |
| PSU | 3,97 | 3,99 | 3,99 | 3,99 | 3,99 | 3,99 | 23,90 |
| Unallocated (approx. 10%) | | | | | | | 32,68 |
| ***Total new*** | ***43,36*** | ***57,85*** | ***55,59*** | ***58,42*** | ***57,71*** | ***61,39*** | ***367,00*** |
| Ongoing activities (Approved) | | | | | | | |
| KIMA | 8,00 | | | | | | 8,00 |
| EIMP | 3,79 | | | | | | 3,79 |
| SPAII | 14,60 | 16,00 | 15,40 | 6,00 | | | 52,00 |
| CUH | 1,30 | | | | | | 1,30 |
| *Total ongoing1)* | *27,69* | *16,00* | *15,40* | *6,00* | *0,00* | *0,00* | *65,09* |
| ***Total new + ongoing*** | ***71,05*** | ***73,85*** | ***70,99*** | ***64,42*** | ***57,71*** | ***61,39*** | ***432,09*** |

*1)Total ongoing is excluding funds to be spent in year 2000.*

## Risks

There will always be the risk that the SPS cannot be implemented as intended or fails to achieve its objectives. Potential risks in relation to implementation includes:

- EEAA failure to co-ordinate the SPS effectively;
- External restrictions placed on the scope of activities of civil society;
- Component partners fail to provide support or allocate resources;
- Control of funds becomes a source of conflict and delay;
- Danida fails to provide adequate and timely TA and transfer of funds.

Partners and stakeholders have contributed to Component design and understand the SPS rationale and process. This reduces risks related to lack of commitment, misplaced expectations, or the divergence of aims of donor and recipient.

**Monitoring and Indicators**

Implementation of the SPS will be monitored and regulated by the use of verifiable indicators at the programme (sector) level and at the individual component level. The process orientation of the SPS components calls for a monitoring system where indicators are used as a management tool. The monitoring procedures of the SPS guidelines will also be followed.

**Implementation Plan**

The three components which are already underway (SPA II, KIMA and EIMP) are scheduled to run until the end of 2002, 2003 and 2004, respectively. The remaining four components are expected to be initiated in two phases: early 2001 (EMG, and ACI) and late 2001/early 2002 (DEM and CEM). All four new components will run until the end of 2006. Already 2 to 3 years after programme activities have commenced formulation of new components and/or preparation of new phases of ongoing ones ) will be carried out.

The SPSD will be signed by EEAA and the Royal Danish Embassy together with tripartite agreements for each component. The Ministry of International Co-operation and the Royal Danish Embassy will sign a government agreement, which must be ratified by the Egyptian People's Assembly prior to programme implementation.

# 1 Introduction

## 1.1 Danida Assistance to the Environment Sector in Egypt

Danish-Egyptian environmental cooperation dates back to 1991, when environment was identified as one of three priority sectors for development assistance from Danida. At present, Danida is the third largest contributor to grant funding. Environmental projects are listed in *Table 1.1*.

**Table 1.1 Danida Environmental Projects in Egypt (1999)**

| Project | Objective | Time Frame |
|---|---|---|
| Organisational Support Programme to the EEAA (OSP) | Organisational support to the Egyptian Environmental Affairs Agency, environmental training and education, and the establishment of a environmental monitoring and information system | 1993-2001 |
| Environmental Information and Monitoring Programme (EIMP) | Monitoring institutions and reference laboratories capable of producing, analysing and managing data on ambient environmental quality (focusing on air and coastal waters) | 1995-2004 |
| Technical Cooperation Office for the Environment | Supporting and strengthening EEAA, implementation of the environmental law, coordination of the donor community and Egyptian counterpart agencies | 1993-1999 |
| Environmental Education and Training Programme (EETP) | Environmental management capacity, environmental education (at primary and tertiary levels) and environmental awareness improved | 1995-1999 |
| SPA Phase 2 | Shore Protection Authority has the capacity to manage the shoreline of Egypt in a sustainable way based on coastal data and research provided by the Coastal Research Institute (CoRI) and physical model tests and research on design of coastal structures carried out by the Hydrology Research Institute (HRI) | 2000-2003 |
| Coastal Pollution (NOSCP) | Contributing to the protection and sustainable use of marine and coastal resources in Egypt by minimising the | 1996-1998 |

| Project | Objective | Time Frame |
|---|---|---|
| | impact of accidental and operational oil spills from ships and other oil handling installations | |
| Health Care Waste Management | Healthcare Waste Management system reviewed and supported at national level and implemented at Cairo University Hospital | 1999-2000 |
| Development of Governorate Environmental Action Plans | Preparation of environmental action plans, institutional capacity development, and implementation of pilot projects in the Governorates of Aswan and North Sinai. | 1994-1999 (N Sinai)<br>1992-1993 (Aswan) |
| Environmental NGO Support Programme | To enable environmental NGOs in Egypt to participate in solving environmental problems and to contribute in raising public awareness. | 1994-1996 |
| KIMA Fertiliser Factory Improvement: Phase 1 | Improved protection from industrial pollution and improved occupational health of employees at KIMA fertiliser factory in Aswan through sustainable compliance with Egyptian environmental laws and better occupational health conditions. | 2000-2001 |
| CARE CAFE in Aswan, Qena, Sohag and Fayoum | To enhance the livelihood of 180,000 residents in 40 communities in Aswan, Qena, Sohag and Fayoum through orienting public behaviour towards environmental problems, their prevention and cure through NGOs by the end year 2000. | 1994-2000 |

It is anticipated that Danida will continue to play a significant role in supporting environmental management activities in Egypt. Support will continue on existing projects and future assistance will be designed according to the Sector Programme Support (SPS) approach adopted in 1994. This method for designing programmes will ensure that Danish support is closely matched to the sectoral policies and ongoing initiatives of the Egyptian Government.

Assistance under the SPS will be provided through components, each of which targets a specific element of a clearly expressed GoE priority.

## 1.2 Preparation of the Environment SPS

Background work to consolidate the various strands of Danida environmental assistance in Egypt into an SPS started in 1997 with a series of workshops. These workshops and two preparatory missions resulted, in 1998, in a "Preliminary Draft Sector Programme Support Document".

In December 1998, an SPS preparation mission visited Egypt to take this preliminary work forward. Extensive consultation with donors, representatives from donor projects, stakeholders and potential partner organisations was undertaken. Towards the end of the mission a stakeholder workshop was held, to confirm the strategy for the SPS, develop components, and identify partners. During subsequent missions in February and March 1999, components were refined in discussions with partner organisations, and an assessment of their feasibility was undertaken.

# 2 National Socio-economic and Policy Context

## 2.1 Background

### 2.1.1 *Geographical*

Egypt covers an area of about 1 million square kilometres and can be divided into 4 main geographical regions: the Nile Valley and Delta, the Western Desert, the Eastern Desert and the Sinai Peninsula. About 95% of Egypt's land area consists of non-arable land (desert and semi-desert areas, salt flats, sand dunes etc.), 3% is cultivated, 1.6% is covered by trees and shrubs, and 0.4% is used for public utilities (roads etc.). The river Nile supplies Egypt with 97% of its water needs, the remainder comes from ground water and desalination plants.

Egypt had an estimated population of about 60 million in 1996, of which about 95% live in the Nile Valley and Delta. This area, which has roughly the same size as Denmark, hosts a population of about 58-59 million and provides almost all of Egypt's arable land. The annual rate of population growth was 2.2% between 1990-95 and is expected to slow down to about 2% in the coming years. The average population density is about 1,400-1,500 persons per square kilometre of the inhabited land. About 45% of the population lived in urban areas in 1995 and the percentage is expected to rise to 62% in 2025. The population density in the urban areas is very high , reaching 33,000 per square kilometre in the Greater Cairo area, and over 110,000 per square kilometre in some of the older parts of the city.

### 2.1.2 *Administration and Social Structure*

Egypt is administratively divided into 26 governorates, 21 in the Nile Valley and Delta and 5 in the deserts. Each governorate is, in turn, divided into a number of districts (*marakaz*) and towns, which are further divided into villages. A governorate is headed by a Governor, who is appointed by the President. The Governor wields considerable power over the local administrative system.

The majority of the population are Muslim. Around 10% are Christians, mainly Copts. In recent years Egyptians have become much more conscious of religion. This is reflected in stronger Islamic symbols and customs in civil life, particular visible in urban areas and in parts of Upper Egypt.

According to the 1971 Constitution, Egypt is a socialist and democratic republic. However, State of Emergency Laws have been in force since 1981 due to political violence.

### 2.1.3 *Public Health*

In recent years an impressive increase has been achieved in the life expectancy at birth for both men and women (65.9 years and 67.2 years respectively). In contrast, maternal mortality rates (174 per 100,000 live births) are still relatively high, and the number of births attended by health personnel is very low (less than 50%). The infant mortality rate has fallen considerably (from 108 per thousand in 1961 to 38 per thousand in 1993), but is still high for a middle income country.

## 2.2 Macro-economic Situation

### 2.2.1 *Overview*

In the late 1970s and early 1980s, the economy of Egypt grew rapidly, supported by oil sales, workers' remittances and growing tourism receipts. In the mid 1980s, however, growth slowed in the region as a whole and macro economic imbalances became severe. Since the early 1990s, Egypt has followed policies of structural adjustment and the economy has performed strongly. Egypt is presently moving towards a more market-oriented economic system.

GDP grew by over 5% in 1996 and 1997, while inflation declined steadily from 12% per annum in 1993 to 4.6% in 1997. The fiscal balance has also improved substantially; in 1991 the budget deficit was 18.1% of GDP, but by 1996 it had been reduced to about 1%.

**Table 2.1 Economic Indicators in Egypt, 1993 to 1997**

| | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|
| GDP at market prices (LE bn) | 157.3 | 175 | 205 | 228.3 | 255.8 |
| Real GDP growth (%) | 3.0 | 3.8 | 4.6 | 5.1 | 5.9 |
| Consumer price inflation (%) | 12 | 8.2 | 15.7 | 7.2 | 4.6 |
| Overall fiscal balance (% of GDP) | -3.5 | -2.1 | -1.2 | -1.3 | N/A |
| Population (mn) | 56.49 | 58.33 | 59.23 | 60.60 | 62.01 |

Source: Country Report, Egypt, 4th Quarter 1998, EIU
Country Economic memorandum, Egypt: Issues in sustaining economic growth, World Bank, March 1997

The economy is generally well diversified, with important contributions arising across agriculture, manufacturing, petroleum products, and trade and financial services.

### 2.2.2 *Future Prospects*

With the success of structural adjustment in the past few years, Egypt is no longer in a formal IMF programme. However the government is expected to press ahead with the reforms, aiming for sustainable economic growth of 7-8% per year by 2001/2. The main springboard of reform will be continued trade liberalisation, privatisation of public enterprises and institutional strengthening. The latter will aim to encourage key financial institutions to operate transparently, in line with concepts of good governance.

There will be pressures on the government budget in the future. The government is facing a reduction in revenues from the Suez Canal and fluctuating oil prices which were at an historical low in 1999. Trade liberalisation will also lead to a reduction in revenues from import tariffs. These three sources accounted in 1998/9 for about 25% of current revenues. The government is trying to raise more revenue internally, not so

much through new taxes, but by widening the tax base and improving collection rates. General taxation currently contributes 32% of current revenues, but this is low compared with other countries (14% of GDP in Egypt compared with at least 20% in Morocco, Tunisia and Israel). Tax evasion in Egypt is high, and tax collection inconsistent, leaving considerable scope for improvement.

## 2.3 Public Expenditure and Fiscal Policies

Data on budgeted and actual public expenditure are not readily available in Egypt. However, it is clear that the budget deficit has been dramatically reduced over the past decade, which points to good fiscal management. This section describes the budgeting process and discusses the budget allocations at the central and regional levels

Budgets for government expenditure are prepared on an annual basis for each financial year, which runs from July 1st to June 30th. Government entities submit their draft budgets to the Ministry of Finance (MoF) for review. The draft national budget is then presented to the cabinet and President before going to the People's Assembly for approval. The mechanism for preparing the governorate and municipal level budget follows a bottom up approach; from Village/district level, to Municipality, city and governorate level. Each level prepares a draft annual budget for submission to the next level up, until they are consolidated into the governorate budget; which in turn is consolidated by the MoF to produce the State budget.

In 1998/9 public expenditure of LE 91.5 billion was budgeted, equivalent to about 36% of GDP. Of this, about 25% is budgeted for salaries and wages and just over 20% for capital expenditure. In the same year the budget for local administration totalled LE 12.9 billion, i.e. 14% of the total. Current expenditure accounted for over 90% of the local budget - capital expenditures are very modest. The following table presents the public expenditure budget for 1998/9, showing the share allocated to local administration. This is particularly pertinent as much expenditure on the environment is made at local level. Thus this data sets the macro-economic context for the environment sector.

**Table 2.2 Public Expenditure Budget for Egypt, 1998/9 (LE million)**

| Item | National budget, 1998/9 | % of total | local admin. | Local as % of National | % of total of local |
|---|---|---|---|---|---|
| *Bab 1 expenditure - wages and salaries | 22,594 | 24.7% | 10,400 | 46% | 80.6% |
| *Bab 2 expenditure - | 48,094 | 52.5% | 1,675 | 3.5% | 12.9% |
| ***Total current expenditure*** | ***70,688*** | ***77.2%*** | ***12,075*** | ***17.1%*** | ***93.0%*** |
| *Bab 3 - investments | 10,985 | 12.0% | 663 | 6.0% | 5.1% |
| *Bab 4 - Capital transfers | 9,853 | 10.8% | 126 | 1.3% | 1.0% |
| **Total budget** | **91,526** | **100%** | **12,864** | **14.1%** | **100%** |

**Source:** The State's General Budget for the Financial Year 1998/1999, Middle East Library for Economic Services 1999

* "Bab" is the term given to the various heads of expenditure

### *2.3.1 Public Revenues*

Public sector revenues are represented by general taxes, customs and sales taxes; and 'Current revenues' that include various surcharges and fees. There are also a number of charges and taxes, which can be levied at the local level (including, for example, agricultural land tax, vehicle taxes and entertainment tax). There is also scope for collecting fees for services delivered by state organisations, which offers potential for cost recovery. For example, charging fees for environmental services.

The state revenues are collected by the offices of the Tax Authority, which are distributed throughout the country. The revenues collected are transferred back to the centre for distribution by the Ministry of Finance. The locally levied taxes are transferred to the governorate or municipality level accounts, and represent the source of revenues for local government along with the state allocations.

## 2.4 Socio-Economic Analysis: Poverty

### *2.4.1 Overview of Poverty in Egypt*

Poverty has been increasing in Egypt over the last years due to the combined effects of the population growth, the weak economic development over a long period and an increased polarization of rich and poor. The reduction of subsidies on food and other essentials and the increase in the cost of health and education have hit the poorest the most.

Women and children are most exposed to poverty. In poor households, females generally carry a heavier workload than males, while the males are given priority with respect to meals, educational opportunities, essential health services, etc. Only about 20% of the women in Upper Egypt are literate. Households supported by women are estimated to constitute about 18-20% of all households. These households are considered the most impoverished. Women's work is a controversial issue. Government jobs are open to women. However, women's work outside the household is generally dis-

couraged by tradition and habit, especially so in rural areas and in Upper Egypt. In some rural areas, women are not expected to participate in any activities at all in public places.

Poverty is more widespread in the governorates of Upper Egypt than in Lower Egypt. In general, the population of Upper Egypt is less well covered by health and education facilities as well as access to piped water and sanitation. Indicators of the health status of the population are all significantly worse for Upper Egypt than for Lower Egypt. Illiteracy rates are also higher, school enrolment rates lower, and drop –out rates higher than the national average.

In the beginning of the 1990s, the estimated average urban income was 40% higher than the average rural income. However, the income distribution is less equal in urban areas than in rural areas and there is a large group of very poor in urban areas.

The main causes of poverty in urban areas are unemployment, casual work and low paid jobs. The urban poor consists of poor jobless migrants from the rural areas, petty traders and casual workers and a large and rapidly increasing number of unemployed graduates.

It is estimated that about 5.8 million people in Greater Cairo live in marginal settlements (that is informal urban settlements) or slums. These areas are overcrowded with substandard houses and shelters, inadequate clean water supply and lack of sanitation and garbage collection. Some of the settlements have developed around large industrial facilities because of access to jobs or low rents. In other settlements, small industrial activities have developed inside the residential areas themselves. In both cases, air, noise and water pollution further add to the unhealthy living conditions.

The health statistics from the marginal settlements reflect poverty in the form of higher infant mortality rates, malnutrition rates and incidence of infectious diseases. In the mixed residential and industrial settlements, the effects of the pollution adds to the above and, for example, include high lead content in blood, respiratory diseases, cancer, hepatitis and increasing numbers of tuberculosis.

### *2.4.2 Gender and Poverty*

Women are more at risk from environmental degradation than men. Given their position in the household they play a major role in domestic waste management, they are generally responsible for disposing of waste material, water collection, and household laundry. The health impact on communities relying on polluted sources for water affects all members but particularly women since it is they that both collect water for drinking purposes, and use it for a variety of household chores.

Furthermore, women's engagement in some industries increases their exposure to hazardous wastes. This can be particularly harmful to women of reproductive age and pregnant women, since the health of the children they are bearing is also threatened.

Poor children, boys as well as girls, constitute a significant vulnerable group who lack status and power to influence their own situation. Child labour within the family is not a new phenomenon in Egypt, but the rapid increase in urban poverty in the 1990s has

brought into focus the large numbers of street children who contribute to family survival.

## 2.5 Gender Issues

Some of the cultural and practical issues affecting women have been discussed earlier. In order to achieve an understanding of how the proposed SPS can support the national policy on gender, and fill gaps where necessary, a number of other issues should be borne in mind, including the following.

**Women's Employment Opportunities**
Paid employment for women can be a controversial issue in Egypt. Government jobs are open to women, but in some communities, women's work outside the household is generally discouraged by tradition and habit. Indeed, in some rural areas, women are not expected to participate in any activities in public places. These cultural attitudes are most prevalent in rural areas and Upper Egypt.

In addition, the gender gap in education has a great effect amongst poor women in urban areas, who have extremely limited access to wage labour largely due to their illiteracy and lack of social mobility.

**Education**
One of the essential strengths of the national policy on gender issues is demonstrated by the almost equal primary and secondary enrolment ratios for girls and boys in 1994. This augurs well for the future but, at present, women lag behind at all educational levels. 1996 figures indicate that for every 100 literate men there were only 66 literate women, and participation rates differ for boys and girls, particularly in higher education.

## 2.6 Human Rights, Good Governance and Participation

### *2.6.1 Human Rights*

Assessment of the human rights situation in Egypt reveals that international conventions are formally ratified but have not always achieved the intended impact in full. Issues of concern include:

- various forms of violence against women;
- inequality between girls and boys, particularly in access to education;
- children in the labour force.

### *2.6.2 Governance*

Decision making power in Egypt is heavily centralised and this has implications for the quality of governance. All decisions have to be taken at a very high level. This impedes transparency and discourages staff from taking initiatives. Furthermore, it makes the decision making process slow, rather than dynamic, flexible and responsive to public needs and interests.

### *2.6.3 Democracy and Popular Participation*

Egypt is a democratic country, although the present state of emergency does limit to some extent the degree of the democratic process and popular participation. However, parliamentary elections are taken very seriously in rural Egypt and voting levels are fairly high. This is in contrast to the cities, where voting levels are low.

Changes in the law governing the establishment of NGOs were needed to facilitate popular participation in many aspects of public life but particularly environmental affairs. In this respect, the new law of associations (Law 153/99) will allow individual registered NGOs more flexibility in their operations. It requires all NGOs to register with the Ministry of Social Affairs (MSA) and seek the Ministry's permission to receive foreign funding. Executive regulations will specify in which areas NGOs will be allowed to work and detail the procedures to be followed under the law.

Initial advice from MSA is that NGOs will be allowed to register, provided that they do not violate the provisions of Article 11 of the law (stating that NGOs are not allowed to work against national unity or undertake activities that fall under the rules governing political parties and syndicates).

Although the main concern of the Government is to direct more funds, more fairly, to the work of NGOs, the law has attracted some criticism since NGOs are required to register with MSA and get their permission to receive foreign funding. The regulations for implementation should be reviewed closely.

Nonetheless, significant achievements have included the first public consultations on environmental issues and an initiative from MSEA to set up public complaint systems.

# 3 The Environment Sector in Egypt

## 3.1 Sector Objectives, Policies and Programmes

### *3.1.1 Overview of Environmental Issues*

**Water Resources**
The protection of the water resources is the most critical environmental issue in Egypt. The main source of water is the Nile River, which supplies about 97% of all fresh water. Pollution of the Nile includes a large number of major industrial point sources as well as from municipal waste water and excessive application of fertilisers and pesticides.

About 90% of the urban population have access to piped water, but its quality varies and WHO drinking water standards are not always met. In rural areas 86% of the population have access to water monthly from standpipes. Many of these standpipes are not adequately maintained.

About 70% of the urban settlements have adequate sewerage. However, wastewater treatment plants have inadequate capacity, are in need of maintenance, or are entirely absent. In general, villages have no domestic wastewater collection systems or treatment plants.

Egypt's wetlands have been receiving increasing amounts of drainage water, untreated or partially treated municipal wastewater and industrial effluent. In spite of their deteriorating condition, the lakes along the Mediterranean coastal plain provided 38% of the total fish production in Egypt in 1995. Their continued pollution, together with development on the littoral areas, is gradually destroying the wildlife habitat and the fisheries resource.

**Air Quality**
Air pollution from major industries and vehicle exhaust is a serious problem in the major cities, with damage to public health and Egypt's cultural heritage. The concentrations of particulates, carbon monoxide, sulphur dioxide and lead are generally much higher than the WHO guideline values. Health effects are indicated by unusually high incidence of Asthma and elevated concentrations of blood lead.

**Urban Environment**
The rapid urbanisation in Egypt has created many economic, social and environmental problems. As cities increase in size, slums and squatter settlements multiply. About 5.8 million people, out of an estimated 13 million in the Greater Cairo Area, (i.e. about 45% of its population) live in marginal settlements and slums. In other governorates, up to 16% of the people in urban areas live in such substandard settlements.

**Municipal Solid Waste**
The collection rate of domestic solid waste is around 70% in the high-income parts of major cities, but only around 15% generally. Annually, a total of about 10 million tones of solid waste is generated by households, and an additional 5 million tones by industry. At a conservative estimate, about 50 thousand tons of this will be hazardous

waste which will pose a severe health risk for garbage collectors and sorters, and may constitute a long term threat to the environment surrounding the disposal sites.

**Marine Pollution and Coastal Zone Management**
The coastal waters of Egypt are becoming increasingly polluted. Pollution from maritime transport, especially from oil tankers, and from oilrigs has been rising. However, most pollution comes from land-based sources.

**Loss of Biodiversity**
Egypt's biodiversity is being lost at an alarming rate. This is mainly due mainly to the destruction of natural habitats by, for example, the continued drainage of wetlands of the Nile Delta and the increase of pollution loads in these wetlands.

### 3.1.2 *Environment Sector Policy and Planning*

The most recent policy statement[1] confirms the Government's commitment to environmental improvement. This statement calls for the introduction and integration of environmental dimensions in all national policies, plans and programmes relevant to protection of human health and management of natural resources. It further calls for the implementation of Law 4/94 for the protection of the environment by providing institutional and legislative frameworks at national and local level. Key challenges are identified as follows:

- addressing the cumulative impacts of environmental problems extending over the past 40 years;
- setting up an information infrastructure that is based on monitoring networks;
- mobilising approximately LE 12 billion in investments until the year 2004;
- rehabilitating existing industries in compliance with environmental legislation;
- establishing a skilled and trained human resource base in the field of environmental management; and
- changing public behaviour and attitudes towards the environment.

To address these challenges, GoE has formulated seven policy directives:

- Fostering partnerships, coordination and collaborative work between the different segments of the society at the national level.
- Fostering partnerships at the bilateral, regional and global levels.
- Implementation of Law 4/94 for the protection of the environment.
- Development and upgrading of natural protectorates and protection of biodiversity.

[1] Environmental Objectives and Policy Directives of August 1998

- Support to institutional capacity development in the Egyptian Environmental Affairs Agency, its regional branch offices and environmental management units in 26 governorates.

- Support to sustainable environmental management systems.

- Operationalisation of market-based instruments in the field of environmental protection.

The SPS is designed to support GoE in the implementation of these directives. More specifically, the SPS is designed to support the implementation of Directive V, which demands establishment of capacity in regions and governorates; and Directives III and VI, which depend almost entirely on effective action at the local level.

### 3.1.3 *Sectoral Policies Relevant to Danish Development Objectives*

**Poverty Alleviation**
EEAA policies make no specific mention of poverty alleviation, but several of the policies detailed in the MSEA Policy Directives (*see Section 3.1.2*) encompass activities whose affects will benefit mainly people living in the poorest areas or people in low income employment. In particular, these include policy objectives concerned with improving local environmental management. Danidas support to decentralisation will reinforce these elements.

**Gender-Specific Elements**
EEAA has given some attention to gender and environment, and the institutionalisation of gender issues in EEAA. EEAAs approach is that the importance of gender and environment is recognised by integrating them in EEAA protocols with other ministries and agencies, into the NEAP and GEAP processes, and into project activities. Rather than setting up a Gender Unit, the approach is to treat gender as a cross-cutting issues, and to promote gender analysis as a guiding principle in the work of EEAA.

The Egyptian Environment Information System (EEIS) programme (financed by CIDA) has served as a spearhead for the promotion of gender analysis. The programme has a specific gender dimension that is being implemented through the collection and analysis of gender disaggregated data in the information system, sensitisation and training in gender analysis, and promoting the integration of gender concerns in environmental policy and decision-making. In support of this EEAA has established a Working Group on Gender.

The results of an internal survey on the need for gender sensitisation and training in EEAA (1999) concluded that:
- the understanding of the social concept of gender as applied to development is generally low;
- the lack of appropriate data and information on social and gender issues is an underlying reason for this; and
- there is a need for training to orient EEAA staff on social gender issues and their relationship to environmental management

The Central Department of Environmental Communication and Awareness has conducted some training with EEAA staff. Gender analysis has also been integrated into the GEAP process through the SEAM project. The Danish SPS can contribute to and help to strengthen these activities.

## 3.2 Sector Set-up and Stakeholders

### *3.2.1 Stakeholders*

**Central Government**
At the highest policy level, environmental matters come under the purview of the Ministry of State for Environmental Affairs (MSEA), whose State Minister is a member of the GoE Cabinet of Ministers. The Minister is also the Chairperson of EEAA.

EEAA is the highest authority in Egypt responsible for promoting and protecting the environment. It was established in 1982, although its current remit was not fully described until the enactment of *Law 4/94, The Environmental Protection Law* and the *Law for Natural Protectorates (Law 102/1983)*. The head of the Agency is the Chief Executive Officer (CEO), who reports to the Minister.

At the regional level, eight Regional Branch Offices (RBOs) will represent EEAA, namely, Greater Cairo, Alexandria, Middle Delta, Eastern Delta, Canal Zone, Red Sea area, Upper Egypt-North Zone and Upper Egypt-South Zone. The process of establishing these offices, which will each be equipped by a mini-lab, is currently under way. So far, the Greater Cairo, Alexandria and Canal Zone (Suez) RBOs have been made operational. RBOs will be responsible for collecting and analysing environmental information, preparing local environmental action plans, supervision of local monitoring stations, launching pilot projects, disseminating EEAA guidelines for environmental protection, and receiving and responding to complaints and screening EAs.

**The Governorates**
Each governorate has environmental management responsibilities, including local enforcement of environmental laws and policies, identification and analysis of local environmental problems and development of plans for remediation, and promotion of public awareness and grass-roots initiatives on environmental protection. These tasks should be carried out by an Environmental Management Unit (EMU) which is part of the governor's office and fully funded by the governorate.

In contrast to the situation with most line ministries that operate at governorate level, there is no direct or formal linkage between Governorate EMUs and the EEAA. The exception is the Department of Natural Protection of EEAA, which has direct responsibility for the management of nature reserves and employs staff in those governorates which contain designated Nature Protectorates.

There have been a number of decrees and laws regarding environmental management at the Governorate level that have resulted in some degree of confusion regarding the division of responsibilities and resources between EMUs and, in particular, the EEAA at central and regional levels. A proposal to resolve this confusion, strongly supported by Danida and other donors, is that the Governorate EMUs (most of which do not

have operating budgets) should be transformed into General Offices for Environmental Affairs (GOEA), with approved established annual operating budgets. GOEAs could have specific co-operative roles assigned to them by the EEAA/RBOs and be provided with technical assistance and financing for the undertaking of specific tasks for the RBOs at local level. In turn, the GOEAs could have an agreement whereby they could use the laboratory services of the RBOs in relation to their monitoring and compliance work.

**Line Ministries**
Besides MSEA and EEAA, as many as 15 line ministries share and exercise environmental management responsibilities. At governorate level, these line ministries generally operate through locally based directorates. The most important include the following.

**Ministry of Industry and Mineral Wealth (MIMW):** Responsible for overseeing the licensing and operation of private sector industries. It has two important operational units:

- the General Organisation for Industrialisation (GOFI). This is the licensing authority for private sector industry. Compliance with applicable environmental legislation is a condition for granting industrial licenses;

- the General Department for Environmental Protection carries out research on cleaner production and ensures that new plants include industrial waste treatment units.

In addition the Federation of Egyptian Industries is affiliated to the Ministry of Industry and Mineral Wealth. It is, however, the intention to make it an independent, self-financing organisation (*see Section 5.9*)

**Ministry of Agriculture and Land Reclamation (MALR):** responsible for the regulation of agrochemicals and management and conservation of agricultural land. It has five important agencies:

- the Central Laboratory for Agricultural Pesticides conducts pesticide research and control;

- the Desert Research Centre performs research on the geological and geophysical, water, plant and natural resources of the desert areas;

- the Land Conservation Agency prevents topsoil stripping and protects the land from degradation;

- the Fisheries and Water Resources Agency manages and conserves the nation's fisheries resources;

- the Wildlife Service manages the country's biological conservation program and co-ordinates closely with the EEAAs National Biodiversity Unit in the protection of these resources within natural protectorates.

**Ministry of Public Works and Water Resources (MPWWR):** is responsible for maintaining and protecting all public water resources in Egypt, including the Nile River and its waterways, lakes, springs, and ground water. It has wide authority to set and enforce standards from central, regional and governorate-based offices including:

- the Shore Protection Authority (SPA) which controls erosion in the coastal areas and supervises remediation activity;

- the National Water Research Centre which conducts water quality monitoring and control activities;

- under the NWRC, the Coastal Research Institute (CoRI) which is responsible for research and the collection and analysis of data on the coastal areas of Egypt; and the Hydraulic Research Institute (HRI) which does physical modelling, research and design of hydraulic structures;

- seven Regional Directorates along the Nile River from where teams of water engineers perform facility inspections and report violations to the police;

- an extensive water monitoring network including laboratories for monitoring and analysis.

**Ministry of Health and Population (MOHP):** is responsible for public health, including the prevention and control of environmentally related diseases. Important agencies include:

- the sector for Preventive Affairs, which includes departments for environmental health, occupational health and food control;

- the Centre for Occupational and Environmental Health, which sets environmental health policy, monitors pollution through a network of sampling stations (37 for water-pollution monitoring and ten for air pollution), trains occupational health workers and undertakes research;

- Health Directorates in each of the governorates, to monitor and implement its policies and programmes.

**Ministry of Housing, Utilities and New Urban Communities (MHUCC):** is responsible for the provision of Environmental services (water supply, sewage collection and treatment, and solid waste management) and for the planning and construction of the new industrial cities. Its main agencies for fulfilling these responsibilities include:

- the National Organisation for Potable Water and Sanitary Drainage, charged with the design and construction of water supply and sanitation systems for cities and towns;

- the General Organisations for Sewage and Sanitary Drainage in Cairo and Alexandria, which undertake the design and construction of sewerage systems and wastewater treatment facilities for those cities;

- Housing Directorates in each of the governorates and Environmental Divisions in each of the new industrial cities.

**The Ministry of the Interior (MOI):** Egypt's national police force has, for some time, maintained an Inland Water Police, for the enforcement of Law 48/1982 and for protection of the environment in general. In response to Law 4/94, a new Environment and Water Police Force has been formed, which now has 78 enforcement officers in the central MOI and an additional 90 officers in the governorates.

**Non-Governmental Organisations and Civil Society**
Non-governmental organisations (NGOs) are beginning to play an active role in the environmental field. Currently, some 70 groups have been defined as environmental NGOs, undertaking public awareness and education, advocacy, and environmental protection activities and services, such as solid waste management. At the national level, they participated in the drafting of Law 4/94. The Association of Garbage Collectors for Community Development and the Association for the Protection of the Environment have been supported by Danida in the past. Both are well known for their contribution towards improving the living conditions of the Zabbaleen community in Cairo.

An Environmental NGO Steering Committee, comprising members from the environmental NGOs, as well as representatives from EEAA, has recently been established by the Agency. Three NGO representatives from the Steering Committee are also appointed to sit on the Board of EEAA, in accordance with a requirement of Law 4/94.

At present, the environmental NGOs tend to be urban-based, with a well-educated middle and upper class membership. NGOs based in the rural and urban poor areas, which specifically focus on environmental issues, are virtually non-existent. Various initiatives, such as Danida support to the CARE-CAFE project in Upper Egypt encourages the involvement of the community in environmental concerns through their community development associations (CDAs).

**Scientific Institutions**
Egypt has universities, scientific institutes and research centres specialising in almost all environmental activities. Many of these have highly qualified and internationally experienced staff. Basic scientific and applied research activities are carried out in all major areas of environmental science.

A significant number of these institutes have on-going cooperation programmes and research projects with EEAA, particularly in biodiversity programmes, and increasingly wish to play an important role in implementation of environmental protection.

### *3.2.2 Institutional and Legal Context*

**Central Government**

Within MSEA, the Egyptian Environmental Affairs Agency (EEAA) has the responsibility for setting national policy on environment, and for co-ordinating environmental management activities. The EEAA was first established in 1982 "to form the link between the Cabinet of Ministers and the different ministries and other bodies concerned with the protection of the environment". The role of the Agency is essentially supervisory in nature, whilst responsibility for project implementation lies with the respective line ministries and governorates. Responsibility for implementation of nature protection activities, however, lies within the EEAA.

Under Law 4/94, the remit of the agency was revised to include the following functions:

- formulate policies for environmental protection ;
- implement some pilot projects;
- prepare draft legislation;
- decide on norms and standards;
- collect national and international information;
- implement EA regulations;
- prepare a national contingency plan against environmental disasters;
- prepare programmes for environmental education;
- co-ordinate the handling of hazardous substances and wastes;
- administer and supervise nature reserves;
- prepare a draft budget for environmental protection;
- administer the Environment Protection Fund.

In order to carry out these functions, EEAA has approximately 600 staff organised into three technical departments: Environmental Quality, Environmental Management and Nature Protection; and four general departments: Financial and Administrative Affairs, Branches Affairs, Environmental Communication and Public Awareness, and Planning, Follow-up and Technical Co-ordination.

In order to fulfil their mandate of co-ordination and working through the line ministries, the EEAA, through the MSEA's Minister's office, prepares specific co-operation protocols with other Ministries. These protocols establish the framework for information flow, personnel exchange and co-ordination in relevant areas. Currently there are six such protocols in operation, with the ministries of Manpower, Health, Justice, Industry, Petroleum and Tourism.

### 3.2.3 Staffing and Human Resources

**EEAA**

The EEAA currently has over 600 professional members of staff (this includes 178 members of staff in permanent EEAA posts and 51 staff seconded on a full time basis). The remainder of its staff are employed on short or full time contracts (349), temporarily seconded (35) or engaged as consultants (14). These totals include 104

new civil service posts approved and advertised in 1998 as well as the additional 200 posts requested by the EEAA for inclusion in the budget for the next financial year.

Capacity has been strengthened through technical co-operation programmes with several donor agencies over recent years, including training in important areas such as: auditing, EA, licensing procedures, database development and management, environmental education, training and awareness and laboratory analytical techniques and laboratory management.

At the RBO level (apart from Greater Cairo) there is currently little capacity other than those staff which work in mini-labs.

A recent document prepared by the Danida-funded OSP, stated that "*EEAA is still a relatively weak organisation. At the present time, EEAA shows evidence of serious deficiencies in overseeing its major responsibilities*" The document lists the following main areas of weakness:

- EA: enforcement, review and follow-up;
- management of coastal zones and marine resources;
- inspection;
- waste management (capacity "*is virtually non-existent*");
- management of protected areas;
- raising environmental awareness.

The recent additions to EEAA staff have gone a considerable way to providing the Agency with a full complement. What is required now is a period of consolidation and further training, particularly to enable the Agency to decentralise some of its operations.

Furthermore, there is no doubt that substantial efforts have been taken by EEAA to achieve a higher level of environmental protection in spite of the limited financial and human resource. Actions have been taken through such programmes as the Nile River Clean Up Programme and the Natural Protectorates and Sustainable Tourism Programme.

**Governorates**
It is generally accepted that, with a few notable exceptions, the governorate EMUs do not have the capacity to develop and implement environmental management programmes. The normal practice in all governorates has been to second three to six individuals from different relevant governorate line ministries to staff an EMU. This is not necessarily unsustainable, but there would be greater staff security, career prospects and budget access if the posts were properly established. As central government does not allocate a budget to the governorates for such units, they all lack basic equipment and funds to operate effectively.

### *3.2.4 Sectoral Budget*

Environment is not, of course, an economic sector, and expenditure on environmental activities cuts across a number of line ministries, in addition to the activities of the MSEA. Expenditure on the environment is not explicit within the public expenditure

accounts, nor within GDP. Actual expenditures on the environment in Egypt comprise:

- expenditures by the MSEA and EEAA;
- expenditures by other line ministries on environmental programmes;
- expenditures on water supply and sanitation and solid waste management, incurred mainly at governorate level and below;
- private sector expenditures; and
- donor funds in addition to resources expended through the EEAA.

The first and last of these are relatively easy to identify, but even here the analysis which follows is still incomplete, as there are data which could not be made available to the SPS appraisal team.

**Expenditure by MSEA/EEAA**

At the central government level the total value of the environment budget in 1997/98 was LE 23.8 million. The budget was increased substantially, by nearly 30%, to LE 30.8 million in 1998/9, mostly because of an increase of LE 5.3 million in the capital budget. All capital expenditure is shown in the EEAA budget, so that the MSEA budget covers only a modest allocation for salaries and recurrent expenditures (see *Table 3.1*).

**Table 3.1 Central Government Budget for the Environment LE'000**

| Account | 1998/99 | | | 1997/98 |
|---|---|---|---|---|
| | MSEA | EEAA | Total | Total |
| Bab 1: Salaries and remuneration | 363 | 2,756 | 3,119.5 | 1,653 |
| Bab 2: Current expenditures | 200 | 1,743 | 1,943.0 | 1,743 |
| ***Total current budget*** | **563** | **4,499.5** | **5,062.5** | **3,396** |
| Bab 3: Capital budget | N/A | 20,690 | 20,690.0 | 20,400 |
| Bab 4: Capital exchanges | N/A | N/A | N/A | N/A |

*Source: Draft Budget for the Fiscal Year 1998/99, EEAA, Ministry of Finance. Breakdown between MSEA and EEAA for 1997/98 from EQI 1998.*

**Sources of Funds**

The main sources of funds for capital expenditure are the National Investment Bank; the Environment Protection Fund, the Tourism and Environment Funds; and foreign capital funding.

The Environment Protection Fund (EPF) was established in 1994 as an 'economic' institution. This means that it has flexibility to accrue revenues, it is independent of the State Treasury, and its resources can be earmarked for specific purposes. The fund was set with initial funds of LE 64 million (USD 18,7 million) and now stands at LE 22 million (USD 6,4 million). The EPF has a number of sources of funds, not all of which are active. The EPF receives an allocation within the EEAA state budget - in 1998/99 this was LE 200,000 (USD 58,400) for Bab 1 and LE 670,000 for Bab 2 (USD 195,500) (equivalent to 7.3% and 38.4% of the EEAA budgets for the two current expenditure chapters). The EEAA budget does not give a separate capital allocation for the EPF.

**Local Government Expenditures on the Environment**
Local revenues are made up of allocations of state revenues which are collected by local tax offices, but distributed according to the central Ministry of Finance and Ministry of Planning; and of locally levied taxes and charges, which can be a useful source of funds for environmental programmes.

In Aswan governorate, estimated total resources for the environmental sector, from donor funds, centrally allocated funds and locally generated revenues, were LE 100 million (USD 29,2 million), i.e. about 28% of total governorate resources. In addition, charges are levied to cover costs of delivery of water services, although, unsurprisingly, they fail to cover costs entirely (2).

### 3.2.5 *Major Elements Without Finance*

Egypt continues to attract donor support from a wide variety of sources. This has been well coordinated (see following section) so that, together with government initiatives, no major element of the national environmental strategy remains without finance. However, the funds are unevenly distributed, and tend to be concentrated in the Greater Cairo area. For this reason, at the request of EEAA, the Danida-funded Environmental Sector Programme Support will focus it activities in the relatively under-supported areas of upper Egypt.

## 3.3 Donor Support and Assistance Coordination

### 3.3.1 *Donor Support in the Environment Sector*

The environment sector has attracted considerable donor support over the past decade, amounting to about USD 200 million. The largest donors have been USAID and KfW, with programmes of about USD 60 million (air quality improvements for Cairo) and about USD 60 million for investment in improving industrial performance in both public and private sectors, respectively.

USAID is in the processing of finalising a new line of programme support to the value of USD170 million, to be disbursed between 1999 and 2003. The funds will be distributed between EEAA, Ministry of Tourism and the Ministry of Petroleum, and will include both loans and technical assistance. The EEAA is expected to receive the major part of the funds (as grant).

(2)The Danida project supporting Aswan Water Authority has estimated that about 29% of water is not billed for; and of that which is only 42% is collected (Progress report No. 3 March 1997)

*Table 3.2* summarises the main donor activities in the environment. A distinction is made between support for institutions and direct support (usually through loans) for investment in pollution control and emissions reduction.

Institutional strengthening attracts about one quarter of the total donor funds, and within this Danida contributes about 20%. Direct activities in pollution control are dominated by the KfW and World Bank projects; and by the USAID EEPP programme. The EEPP programme amounts to about USD 170 million, of which USD 60 million is earmarked for institutional strengthening. The new USAID programme significantly increases the total level of support to the sector, but over the period 1994-96 total support was around USD 165 million (and some of that is ongoing into the current period). Broadly speaking, the value of support to the sector could be estimated as lying somewhere between USD 50 and USD 70 million per year.

Based on discussions with donors in Cairo, it seems that the capacity for disbursement and effective utilisation of these resources is developing steadily. Remembering that Law 4/94 for the environment was only passed in 1994, this is a new and inexperienced sector. The development in capacity suggests that, even with the large USAID programme, there is financial and institutional capacity to implement the planned donor support.

**Table 3.2 Donor Activity in the Environment Sector (USD million)**

| *Donor* | *Time frame* | *Institutional Support* | *Direct investment* | *Application/type of support* |
|---|---|---|---|---|
| *JICA* | *1994 (ongoing)* | *6.oo* | | *Equipping RBO laboratories* |
| *DFID* | *1995 to present. Phase 2 under preparation* | *1.50* | *1.oo* | *Cleaner production and support to two EMUs (SEAM 1 and 2)* |
| *CIDA* | *Over 7 years, from 1998* | | *14.50* | *Support to NGOs and SMEs (EEIF)* |
| *KfW* | *Ongoing* | | *64.71* | *Loans to private and public sectors for investments including environmental, focus on waste water treatment. US$ 38 million already disbursed as loans to private sector.* |
| *EPAP - World Bank* | *Started in 1998* | *5.70* | *35.oo* | *Loans to industry for pollution abatement. Strengthening three RBOs and 4 EMUs in Alexandria, Cairo, Qaliubiya, and Suez.* |
| *EEPP - USAID* | *Under preparation* | *60.oo* | *110.oo* | *Funds to be allocated through Min of Tourism, Min of Petroleum and EEAA/EPF* |
| *METAP* | | *0.58* | | *Institutional support to EMUs in Sharkeya and Ismailia* |
| *USAID - Cairo Air Project* | *Ongoing* | | *60.00* | *Restructuring of lead smelters within wider air quality programme for Cairo* |
| *DANIDA* | *Ongoing* | *9,27* | *3,90* | |
| | *SPS (under preparation)* | *15,32* | *29,60* | |
| **TOTAL** | | **98,37** | **318,70** | |
| *Of which Danida (%)* | | *25,0%* | *10,5%* | |

*Source: Donor sources, discussions in Cairo 1999/2000*

### *3.3.2 Coordination of Donor Assistance*

Donor co-ordination within the Environment Sector is relatively well developed. Since 1998 Danida has chaired the donor co-ordination group for environment, as it did from 1993-97. An informal division of work has been established between the various donors on their support to environmental sub-sectors.

Several other donor agencies have also shown increasing interest in the field of environment, and at present more than one hundred projects are under preparation [3]. This calls for close donor coordination to avoid overlaps and to avoid exceeding the absorption capacity in this new sector, which is only gradually being built up.

A Donor Assistance Sub-group on Energy and Environment has been established, consisting of some 15 bilateral donors and 10 multilateral organisations. Meetings are held every 6-8 weeks to exchange information, co-ordinate developments of the various donor programmes and acquire insight into the environmental issues of Egypt through thematic presentations by experts.

The sub-group may establish ad hoc task forces or informal groups to address selected issues, for example regarding support to the environmental improvement of Egyptian industries.

The group has recently conducted a survey jointly with the environmental authorities on constraints in project implementation. The donors have subsequently agreed with EEAA unified modalities for project implementation, including restrictions on the use of individual incentives.

The donors' vision for future co-ordination includes ways of emphasising issues related to the poverty orientation of donor assistance, as well as efforts to address cross-cutting issues, such as gender, good governance and democracy. The donor sub-group will also be a forum for facilitating complementary environment sector programmes and joint reviews.

[3] A complete list is held at RDE, Cairo

# 4 Danida Development Policies

## 4.1 Policy Framework for Egypt

### 4.1.1 *Danida Environment Policy*

Danidas considerations for environment in development assistance dates back to the beginning of the 1980s, and increased in the wake of the Brundtland Report. In the period following, general principles and guidelines for dealing with environment have been published ([4]) that recognise the interrelationship between environmental and development problems in developing countries, and the consequent need for an integrated approach.

Based on this, it is emphasised that environmental assistance programmes will have the following characteristics:

- a policy dialogue will be established with the Ministry of (Economic) Planning as well as the Environmental Authorities and the sector ministries;
- support will be offered to authorities at provincial and local level as well as the central authorities;
- popular participation will be actively promoted through support to local NGOs and through the involvement of the relevant population groups in planning and implementation of all components within the sector support programme;
- private investments shall be encouraged and stimulated in order to transfer and expand the use of environmentally friendly technologies in the cooperation countries;
- support will be given to the participation of its cooperation countries in regional and global environmental agreements, and in fulfilling their obligations under such agreements.

### 4.1.2 *Policy for Sector Programme Support*

The strategy for Danish development assistance to any country emphasises poverty alleviation as a fundamental principle. Furthermore, it calls for:

- the promotion of sustainable economic growth. This would include the use of redistribution policies as an integral part of economic policy;
- the development of the social sectors, including health and education. These would be seen as prerequisites for the development of human resources ; and
- the promotion of popular participation in the development process; and the development of a society based on the rule of law and good governance. These would be seen as prerequisites for stability and economic, political and social progress.

([4])a Plan of Action for Environment and Development (1988); Guideline on Environmental Assessment for Sustainable Development (1994); Environmental Assistance to Developing Countries 1996; Strategy Towards the Year 2000" contains a section on environment and development.

In brief, any sector programme should address issues that are of particular relevance to poverty alleviation and the cross-cutting themes of:

- equality of opportunity (gender and ethnicity)
- environment
- good governance

The systematic integration of environment into all activities in other sectors is part of the aim of mainstreaming environment into Danidas assistance portfolio. At the same time, however, the crosscutting themes can act as independent development assistance areas. Out of Danidas 20 cooperation countries, environmental support is provided in five countries: Egypt, Bhutan, Bolivia, Nepal and Nicaragua.

### 4.1.3 *General Policy in Egypt*

Danidas Strategy for Danish-Egyptian Development Cooperation (1996) outlines Danidas policy for Egypt. The overall objectives of Denmark's cooperation with Egypt are:

- promotion of economically and ecologically sustainable development;
- improvement of the living conditions for the poorest sections of the society;
- support to the development of democratic institutions in the country.

**Box 4.1 Strategic principles for the SPS development (December 1998)**

During the annual consultations between Danida and the Government of Egypt in October 1998, it was agreed that the future environmental support would be developed in accordance with the guiding principles of the SPS approach. These were refined and customised for Egypt by a consultative SPS preparation process.

The SPS should be composed to reflect the objectives, policy directives and priorities of the State Minister for Environmental Affairs and the EEAA.

The programme should be focused. Priority should be given to solution of a few environmental problems rather than dispersed over a range of issues.

The programme should consist of integrated components rather than a mixture of individual activities and projects.

The programme should include a mix of activities related to capacity development and concrete activities in the field.

The institutional support given so far will be concentrated, consolidated and further developed. The decentralisation process for environmental management in Egypt will be supported and priority should be given to the full implementation of a few of EEAA responsibilities as defined in Law 4/94.

The programme should have a geographic focus. Priority should be given to areas where Danida is already active either within the environmental sector or in other sectors. Sector oriented components could also be considered, in their own right. However, if feasible, the concrete activities should be carried out in the geographic focus areas

The programme should be based on the principles for Danish Assistance in relation to e.g. poverty alleviation, democracy, good governance and gender.

The programme should target areas, where the assistance would have the maximum impact, paying attention to the available budget frame of 50 Million DKK/Year

### 4.1.4 *Focus of the SPS*

In Egypt, assistance so far has been targeted at strengthening the capacity of the EEAA and to a limited extent the governorates to manage the environment. The SPS approach builds on achievements made in these areas. Furthermore, it systematically provides for the sustainability and relevance of the assistance by ensuring that the objectives, policy directives and priorities of the government, as articulated by the Minister of State for the Environment and the EEAA, are addressed.

To achieve the visibility and impact within the available resources, Danida has concentrated its assistance on four key areas:

- Capacity development in environment
- Decentralised environmental management incl. MSW initiatives
- Industrial pollution precaution
- Coastal zone management

## 4.2 Danida support to Other Sectors in Egypt

The total financial framework for Danish grant funding to Egypt amounts to DKK 195 million (about USD 30 million) per year, equivalent to about 1-1.5% of the total donor assistance to Egypt. DKK 60-70 million is earmarked for the environment sector annually. The remainder is focused primarily on the Water and Sanitation sector, and the Renewable Energy sector, with only a few small individual projects in some other areas.

### 4.2.1 *Water and Sanitation*

Activities are located in Upper Egypt, Aswan and Quena governorates, and cover:

- the establishment of improved water supply and sanitation;
- support to rehabilitation of existing water stations;
- support to the establishment of independent water and sanitary drainage authorities with consumer participation in two governorates; and
- technical assistance to local authorities to strengthen their capacity to operate and maintain the water supply facilities in the governorates.

Danida initiated the development of an SPS for the Water and Sanitation sector towards the end of 1999.

### 4.2.2 *Energy*

Danidas activities focus on the promotion and development of new and renewable energy sources and the introduction of energy conservation measures. The assistance includes:

- building of wind farms and demonstration of the economic and productive potential for wind farms connected to the national transmission net;
- strengthening of the Egyptian authorities' capacity and capability to plan, implement, operate and maintain large-scale wind farms;
- establishment of a control centre for the Suez Canal Zone, to improve the monitoring and control of the transmission net.

Development of an SPS for the energy sector was initiated in mid-1999.

### 4.2.3 *Other*

The present project portfolio also includes support to rehabilitation of flour mills; support to the Social Fund for Development primarily in Upper Egypt; and a primary health care project in Upper Egypt with a component on community and environmental hygiene (construction of latrines, cleaning of streets and canals for solid and human waste, etc.) in rural villages.

Two facilities are also available, that provide grants and/or credits:

- the Mixed Credit Funding Facility provides 10-15 years interest-free credit to purchase Danish goods and services for projects in various sectors;

- the Private Sector Development Programme makes grants available to facilitate long term commercial cooperation between Danish and Egyptian companies.

In addition, further support to the relief of Egypt's international debt is part of the country programme.

## 4.3 Danida and Danish Support Capacity

A large part of the SPS involves capacity development and technical assistance. These are areas, which Danida is well positioned to support in Egypt. Danida has worked extensively in Egypt over the past decade developing institutional capacity. However, there is also scope for the use of other Danish goods and services, particularly through achieving compliance with environmental legislation in industry (ACI). Well over half of the budget for this component will support investment in environmental controls, from good housekeeping through to end of pipe controls. This programme offers good opportunities for the supply of Danish goods and services.

# 5 Description of Support

## 5.1 Background

To date, most of Danidas assistance to Egypt in the environmental sector could be classified under the broad heading of developing national environmental management capacity. A considerable part of this activity has been anchored at central level in the EEAA, where good and productive relationships have been established.

National policy is now to put more emphasis on environmental planning, enforcement and improvement activities at the local level. This will include regional branch offices, governorates and, eventually, municipalities and communities. In the short term, EEAA intends to create 8 Regional Branch Offices and to coordinate activities in 26 governorates. In the longer term EEAA may establish an RBO in each governorate.

Whichever model is pursued, the decentralisation process will be a complex and multi-faceted undertaking that may take up to ten years to complete.

Building effective environmental management units at local level and providing support and expertise from the centre has been identified in EEAA policy documents as one of the major challenges facing the Egyptian environmental sector in the coming years.

## 5.2 Development Objective and Strategy

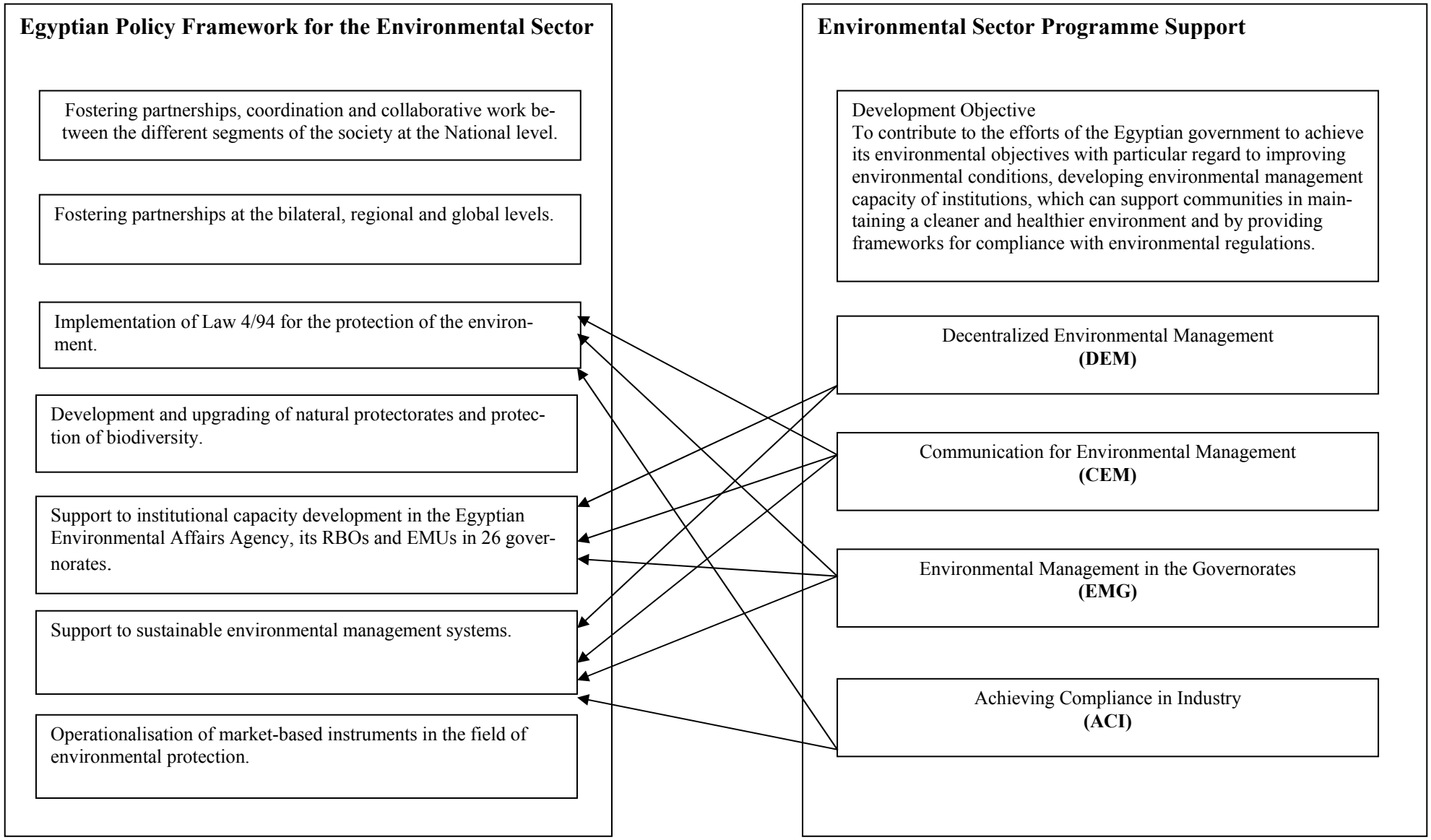
### 5.2.1 *Development Objective of the SPS*

To contribute to

- the efforts of the Egyptian government to achieve its environmental objectives with particular regard to improving environmental conditions, developing environmental management capacity of institutions, which can support communities in maintaining a cleaner and healthier environment and by providing frameworks for compliance with environmental regulations.

The SPS has been designed to address major environmental sector challenges and support the Government of Egypt in achieving its environmental objectives. The Egyptian Policy Framework for the Environmental Sector and the links to the Danida-supported Environmental Sector Programme Support are outlined below.

**Figure 5.1 Egyptian Policy Framework for the Environmental Sector - Danida-Supported Environmental Sector**



### *5.2.2 Strategic Principles*

**Poverty focus.**

Poverty orientation is the overriding principle for Danida support. Direct poverty focus is based on the following principles in the present sector programme:

- priority to poverty stricken areas (particularly relevant in relation to showcase projects).
- identification of vulnerable groups (particularly relevant in relation to showcase projects).
- resource planning should aim to empower communities (with particular emphasis on areas and vulnerable groups) to undertake environmental management.
- monitoring of poverty-environment-gender linkages through baseline information and subsequent development of poverty approaches.

It needs to be noted that in two components the poverty focus is mainly indirect; namely in the DEM and ACI components.

**Gender**

Given the overall emphasis in the implementation strategies on participatory planning and developing community-based environmental management there is the opportunity to pay particular attention to gender issues. Whilst environmental issues affect all members of a community, they also affect different groups within a community differently. The participatory approach to be followed provides the opportunity for environmental impact analysis from the perspective of each of the different groups, and allows for the involvement of each of the different groups in decision-making processes.

**Capacity Development in Environment**

Capacity Development in Environment (CDE) is a major strategic principle guiding the SPS. These principles cover:

- working with partner organisations that have a clear and sustainable future performing the supported function;
- allowing the partners' absorptive capacity determines the volume of technical assistance inputs;
- giving partners as much control as is feasible over component activities and management;
- ensuring that capacity development and concrete project activities should go hand in hand; and
- ensuring that partners are found from as wide a cross-section of society as possible

## 5.3. Components of the SPS

The development objective of the SPS and the immediate objectives of the 4 new components are shown in Figure 5.2. The figure also relates these objectives to the policies of the Government of Egypt.

**Figure 5.2 Objectives of the ESPS**

<table>
<tr><td colspan="4">Development Objective<br>To contribute to the efforts of the Egyptian government to achieve its environmental objectives with particular regard to improving environmental conditions, developing environmental management capacity of institutions which can support communities in maintaining a cleaner and healthier environment and by providing frameworks for compliance with environmental regulations.</td></tr>
<tr><td colspan="4">*Egyptian Policy Framework for the Environmental Sector<br>• Implementation of Law 4/94 for the protection of the environment<br>• Support to institutional capacity development in the Egyptian Environmental Affairs Agency, its RBOs and EMUs in 26 Governorates<br>• Support to sustainable environmental management systems</td></tr>
<tr><td>Decentralised Environmental Management<br>(DEM)</td><td>Communication for Environmental Management<br>(CEM)</td><td>Environmental Management in the Governorates<br>(EMG)</td><td>Achieving Compliance in Industry<br>(ACI)</td></tr>
<tr><td>Immediate Objectives<br>• EEAA able to carry out their decentralised environmental management.<br>• (Selected) RBOs able to fulfil their mandates according to Law #4/94.</td><td>Immediate Objectives<br>• Dissemination of environmental information to support the priority environmental strategies of the EEAA, EMUs and other partner stakeholders.<br>• Awareness of environmental issues and capacity of decision-makers, implementers in the EEAA, governorates, and the industrial sectors are enhanced.</td><td>Immediate Objectives<br>• The EMUs in Aswan and Beni Suef enabled to carry out their mandated environmental management functions<br>• Participatory GEAP process functioning in Beni Suef and Aswan that involves people at the community level in identifying and rectifying local environmental problems through community based and replicable projects</td><td>Immediate Objectives<br>• Environmental Compliance Office (ECO) at FEI serves as a link between the industry, the ETC, EEAA, and financial facilities.<br>• Awareness and usage of cleaner production (CP) in at least three sectors (Chambers) of the Egyptian industry.<br>• Egyptian technical consultants (ETC) promote and implement cleaner production (CP) in the industry.</td></tr>
<tr><td colspan="4">* There are seven Egyptian Environmental Objectives and Policy Directives (see figure 5.1).</td></tr>
</table>

## 5.4 Ownership, Accountability, Sustainability

### *5.4.1 Ownership and Accountability*

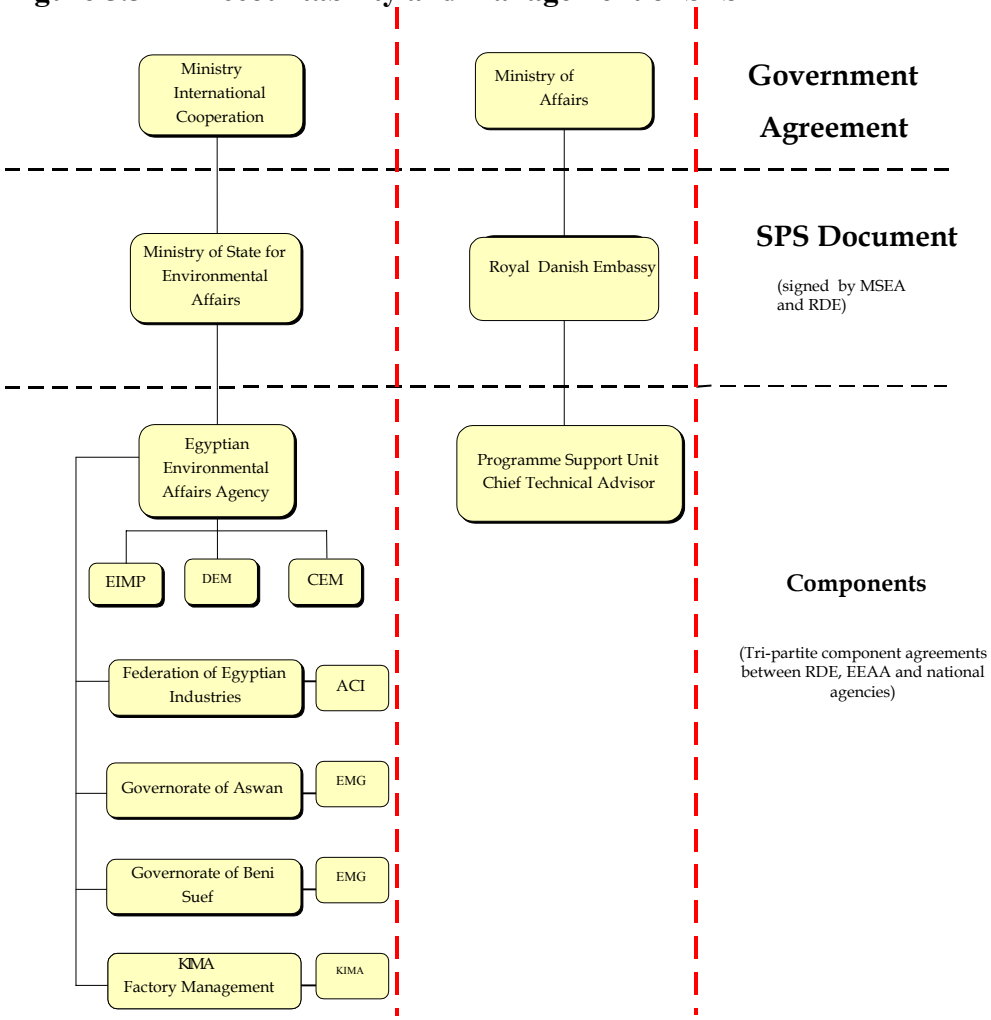
Agreement on the content of the SPS has been reached with the Minister of State for Environmental Affairs, who will sign the SPS document on behalf of the responsible sector agency. Then, after approval by the Advisory Board of Danida and the Finance Committee of the Danish Parliament, a Government Agreement to implement the SPS should be signed with the Ministry of International Co-operation, and ratified by the Egyptian Parliament. The steps necessary to complete ratification of project documents involve several government authorities, including the President's and the Prime Minister's Offices.

Prior to ratification and at the time of signature of the SPSD, a memorandum of understanding for each component will be drawn up setting out how the component will be implemented and detailing the responsibilities of each partner. This will be a tripartite agreement to be signed by the head of the implementing agency, which could in some cases be a department of EEAA, the CEO of EEAA and the RDE.

Thus, partnership for this assistance will be necessary at three levels as shown in *Figure 5.3*. Ownership and accountability will reside with the agencies appropriate to each level.

**Government Level Agreement to Cooperate in the Sector**
As described above, at the highest levels of government there will be Government Agreement between the Danish Ministry of Foreign Affairs and the Egyptian Ministry of International Cooperation. This will be ratified by the Parliament in Egypt. The Government Agreement will set out the basic form of the assistance and the agreed development objectives, and set out the framework for monitoring and evaluation of progress through the lifetime of the SPS.

**Figure 5.3 Accountability and management of SPS**




## Agreement to Implement the SPS

The MoIC will assign the implementation of the Agreement to the MSEA. MSEA, operating through EEAA, will be the partner responsible for integrating SPS activities into its own national environmental planning and programmes, and coordinating them with the activities of other significant stake-holders (line ministries, other donors, governorates). Parallel responsibility will be exercised by the Royal Danish Embassy in Cairo, to maintain regular contact with MSEA and coordinate between the environmental SPS and other Danish assistance initiatives in Egypt and the region.

## Agreement to Implement the Components

Although EEAA is the leading environmental authority, it will not be responsible for implementation of all the components. The programme will be coordinated from EEAA and a major part of the assistance will go to EEAA in the form of components located within three different departments. For the other components, however, EEAA has assisted Danida in identifying partner organisations whose basic approach, interests and activities matched those required to implement the component. This has the added advantage of developing capacity outside the central agency, in line with the CDE approach of the entire SPS.

Agreements to implement the components as set out in the Component Descriptions will be signed with the Chief Executive Officer (or person with similar responsibility) of each partner organisation and the Royal Danish Embassy as set out in *Table 5.1.*

**Table 5.1 Components, Partners and Responsible Authorities**

| Component | Direct Partner | Responsible Authority |
|---|---|---|
| Institutional support to EEAA | EEAA<br>SPS Programme Director | CEO of EEAA |
| • Decentralised environmental management | EEAA Office for Branch Affairs | |
| • Education and awareness for environmental management | EEAA Department of Communication | |
| • Environmental Information and Monitoring Programme | EEAA Department of Environmental Quality | |
| Environmental management in the Governorates | | |
| • Environmental management in Aswan | EMU Aswan | Governor of Aswan |
| • Environmental management in Beni Suef | EMU Beni Suef | Governor of Beni Suef |
| Achieving cost effective compliance with environmental legislation within industry | Environmental Unit of FEI | CEO of FEI |
| Monitoring and managing shore protection activities | Shore Protection Authority<br>Coastal Research Institute Hydraulic Research Institute | Shore Protection Authority and National Water Research Centre |
| Environmental Improvement of KIMA fertiliser and ferro- silicon factory | Kima Factory Management | Kima Holding Company (Ministry of Public Sector Enterprise) |

**Agreement to Implement Showcase/demonstration Projects**

Showcase/demonstration projects are a key part of the EMG and the ACI components. It is anticipated that many of these will be carried out by the local authorities in participating governorates (Markhaz) or civil society groups (NGOs, CDAs, academic institutions, owners of SMEs), whose responsible officers will sign a contract with the

component managers. This will help to extend ownership to the target groups and to all the beneficiaries of environmental improvement activities.

Responsibility for effective implementation of each component lies first with the head of department of the direct partner and then with the highest executive officer of the organisation to which the partner belongs. EEAA is responsible for the implementation of the entire programme, and its role as coordinator of each component will be formalised and reinforced in a Memorandum of Understanding (see *Section 9.2*). Thus accountability is assigned at every level, making use of the existing reporting structures as far as possible.

The CTA will be responsible for monitoring progress of each component and reporting at intervals to the Embassy Coordinator (see *Section 9.1*).

The principle of local ownership was built into the SPS as far as practicable in the circumstances at the time of its development. Thus, not only were extensive consultations held and comments invited from potential partners at all key stages (identification, component development, feasibility assessment, draft SPS formulation) but partners worked with consultants to structure components, and determine the content.

During the consultations, Egyptian partners expressed a strong need for more ownership of the process, including a significant degree of control over budgeting and expenditure. They also wanted assurance that technical assistance (in the form of international advisers) would not dominate the budget.

These concerns were accommodated as follows:

- components were designed so that resources used to fund inputs from international consultants do not exceed 40% of the component budget; and

- a system has been designed that allows funds allocated for local goods and services to be controlled by the local partner, with appropriate procedures to ensure transparency and to satisfy Danidas financial management requirements.

### 5.4.2 *Sustainability*

This sector programme marks the transition of Danish environmental assistance to Egypt from a package of discrete projects, to the support of elements of the national policy for the sector. The SPS has taken considerable time to prepare, compared to the time needed to develop projects. This is because it considers a policy horizon of 10-15 years; it must incorporate the flexibility to adjust to meet emerging needs or revised priorities. A continuous policy dialogue will make it possible over time to prepare adjustments to existing components and/or develop new components within the strategic principles of the SPS. Benefits of this approach include the assurance of continued relevance in this dynamic sector, and increased institutional, financial, and technical sustainability.

Each component has detailed arrangements to promote sustainability, all of which derive from a set of principles, including the following:

- long-term technical assistance will always include the objective of developing capacity amongst permanent staff at the recipient institution, such that there is no further need for it at the end of the programme;

- international short-term technical assistance will always be matched by locally hired consultants with the aim of developing local private sector capacity to provide these services;

- equipment will only be provided that can be locally maintained and operated, with the likely future resources of the local owners;

- a key criterion for selecting activities for support will be the likelihood that they can eventually be financed without the need for external funds.

Experience in Aswan also shows that charging for services rendered to the private sector (e.g. river boats) and cost recovery charging (solid waste) are viable options for long-term financial sustainability.

## 5.5 Assessment of Risks to SPS Success

### 5.5.1 *Uncertainties, Complexities, Potential Conflicts*

**Beyond the Sector**
The SPS has been designed and its feasibility assessed, in the context of the political, socio-economic, and institutional situation as it is most likely to develop over the coming ten years (see *Chapter 2*). Nevertheless, it is possible that unforeseen events arising from uncertainties and complexities outside the environment sector may disrupt implementation of the SPS as currently planned. Such events could include the following:

- macro economic performance declines, inducing unemployment, reducing willingness to pay for environmental services;

- inter-ministerial rivalry (between for example MSEA, Local Government, Housing, Health, Education) prevents cooperation, information sharing and joint initiatives needed to implement demonstration projects etc;

- Government's willingness to decentralise and commitment to good governance provisions is put into doubt by domestic unrest or external events;

- Government becomes unwilling to allow civil society (NGOs, CDAs, academic institutions etc.) to continue its development and participate actively in raising awareness, decision making and reviewing public sector performance.

**Within the Sector**
The SPS has been designed based on a thorough analysis of the environment sector in Egypt (see Chapter 3), and assumes a level of capacity and cooperation from both government institutions and civil society. These are reasonable assumptions but difficulties may nonetheless arise that would affect the implementation of the SPS including the following:

- EEAA ability to coordinate and absorb support proves inadequate (perhaps because other donors overload them, or because key elements of its current management capacity, currently supported by donors, cannot be sustained);

- stakeholder involvement cannot be maintained, because their expectations are not met quickly enough, other activities distract them, they feel that they are unable to exert sufficient influence, they lack capacity to contribute in the way that they would wish, etc;

- division of institutional responsibilities (particularly between central and local government bodies) remains unclear and becomes a source of conflict;

- control of funds is as far as practicable left to partner organisations but proper reporting is difficult to obtain and therefore control of funds cannot be maintained at the level Danida requires.

### *5.5.2 Implications for the SPS*

The uncertainties and unexpected events listed above may give rise to conditions that delay or prevent effective SPS implementation or cause the SPS to fail to achieve its objectives. The major risks are as follows.

- Failure to implement and sustain organisational reforms or to allocate sufficient resources in EEAA leads to inability to manage the SPS effectively. The consequences include slow decision-making and failure to coordinate central activities, inhibiting implementation of SPS and preventing partners from applying lessons learned.

- Rivalry and/or conflict over who has jurisdiction over a particular activity causes partners to rethink their roles and suspend or withdraw support entirely.

- Partners lose interest and/or fail to allocate sufficient resources (in particular, properly qualified staff), perhaps because other activities bring more immediate rewards or access to other funds is easier.

- The effort that has to be expended on control of funds becomes disproportionately large and a source of conflict between Danida and its partners. Potential misuse of funds becomes severe enough to delay implementation or even to cancel a component.

- Delay in provision of or inability to identify timely and adequate technical assistance from Danida.

### **5.5.3** ***Risks of Unintended Impacts***

In addition to the risk that the SPS cannot be implemented as intended or fails to achieve its objectives, it may be that the SPS unfolds as planned but has unintended, undesirable consequences. These might be due to the aggregate effect of individual or corporate responses to the changed social, economic and regulatory environment created by SPS activities.

Key risks of this kind include the following:

- emphasis on sustainability promotes user charges that exclude the poor from the services designed to help them;

- costs of operating SMEs rises due to increased emphasis on pollution control, reducing take-up of SPS services and promoting unemployment and poverty amongst already vulnerable populations; and

- well-funded opportunities for SPS funded local consultancy attracts highly qualified personnel out of public service, weakening the very institutions the programme intends to strengthen.

### 5.5.4 *Why Risks are Acceptable*

**Overall**
A thorough consultation process has been undertaken that included meetings at every key decision point. Partners and stakeholders have contributed to component design and understand the SPS rationale and process. This reduces all those risks that arise due to lack of commitment, misplaced expectations, or the divergence of aims of donor and recipient.

**Failure to Coordinate**: EEAA has a track record of (qualified) success, that has prepared it to undertake the key coordination role. Ongoing and continued Danida support (OSP II) will enhance its capacity to mediate effectively between stakeholders and to disseminate lessons learned.

**Constraints on Local Democracy**: Egypt is becoming a middle income country with a well-established democratic process. The move towards decentralisation is recognised as an essential next step, both in the broadening of democracy and the continued growth and development of the economy. Danidas contribution will assist in developing capacity within the civil society that is a necessary adjunct to transfer of power from the centre. There may be temporary setbacks due to internal unrest or external conflict, but SPS activities will contribute to the demand for decentralisation and increase its effectiveness, where implemented. The SPS will thereby make a contribution to supporting political commitment to decentralisation and lessen the risk that central or local governorate may feel it necessary to suspend or constrain popular participation.

**Rivalry and Conflict Between Stakeholders**: During preparation of the SPS, a number of areas were identified where several institutions have overlapping jurisdiction. Other donors are aware of these also. Together with other donors, Danida is lobbying for clarification of the legal instruments giving rise to the confusion. In addition, the approach of stakeholder involvement and joint implementation will serve to minimise such risks.

**Partner Loses Interest/ Fails to Allocate Resources:** In addition to involving partners in component formulation (described above), component implementation strategy is designed to give partners a great deal of freedom of action, including control over the spending of funds on local goods and services (subject to sound accounting prac-

tices and appropriate reporting). Potential for partners to be recruited to competing donor programmes has been greatly reduced by the donor coordination forum (of which Danida is the current chair), and the activities of TCOE.

**Misuse of Funds:** The SPS includes support for the EPF, potentially technical assistance to the PSU and accounting support to each component (see *Section 11.3* for full description of flow of funds). Experience with ongoing activities in Egypt (OSP and EETP) suggests that there may still be occasional problems in reporting accounts promptly and in ensuring that funds are spent only on items directly associated with component activities. Nevertheless, the benefits in terms of ownership and capacity development justify the taking of some risks, and the safeguards put in place to prevent misuse of funds reduce the risk to an acceptable level.

**Unintended Impacts**
The primary methods for mitigating risks of unintended impacts of SPS activities are:

- to design components appropriately in order to avoid them;
- to monitor for their effects; and,
- to be prepared to make the necessary adjustments.

Each component has been designed in awareness of the potential adverse effects on non-target groups. The PSU will extend its routine monitoring to include indicators of these effects and report findings to the annual review team. The risks will, therefore, be minimised and remedial action will be taken where untoward effects are identified.

# The Components

## 5.6 Decentralised Environmental Management (DEM)

### *5.6.1 Institutional and Organisational Framework*

The Decentralised Environmental Management (DEM) component will support EEAA in shifting implementation of environmental management to the regional level.

The component will be anchored in the EEAA with the Central Department of Branches Affairs (CDBA) as the primary partner. The department is responsible for the liaison with and management of the RBOs, and is the functional link between the RBOs and the various departments of the EEAA.

The approach to regionalisation and the pace at which new offices will be opened is still under development. The short term policy remains to open 8 RBOs but in the longer term, RBOs may be opened in every governorate and may then subsume the responsibilities of the governorate EMUs. [5]

The DEM component will be implemented in a phased approach with sufficient flexibility to accommodate the pace and approach the EEAA applies to its efforts to decentralise. The component will provide support to two RBOs, in addition to technical assistance at the centre. The component partners would then include the local management of the two RBOs, to be selected during the first year of implementation.

### 5.6.2 *Problem Analysis*

The capacity of EEAA Head Office in Cairo has increased markedly over the last 2-3 years. Staff have been recruited to most of the key positions, and the Agency is more and more recognised as the focal point for environmental management initiatives, in accordance with the spirit of Law 4/94. Enforcement of the law requires, however, an effective EEAA presence at the local level and the involvement of local as well as central authorities. In recognition of this, the environmental Policy Directives issued in August 1998 emphasised increased decentralisation of environmental management.

Current EEAA strategy for achieving decentralisation envisions RBOs playing a key role in:

- extending EEAA presence around the country, thus improving local access to its services and facilitating its guidance, coordination and oversight activities;
- liaising between the Governorates (including EMUs where one exists) and the EEAA technical and policy making departments; and,
- supporting the governorates by, for example, assisting in environmental planning, review of EA, auditing and inspection of industrial facilities, and providing laboratory services.

[5] Dr. Ibrahim Abdel Ghalil, personal communication, 23 June 1999.

If, however, the RBOs are not adequately staffed and equipped and cannot provide support effectively, they may become a constraint on local initiative, or simply become irrelevant as the more dynamic governorates bypass them. Issue of a decree setting out the roles and responsibilities of RBOs vis-à-vis EMUs and the development of the capacity of these offices is, therefore, essential to the efficient functioning of the entire environmental management system.

The Central Department of Branches Affairs of EEAA is responsible for coordinating activities outside headquarters, but remains understaffed and lacks the institutional and technical capacity to manage this role. The problem will become more acute as more RBOs are established. EEAA is considering restructuring the department, significantly increasing the number of staff, extending its remit and strengthening its links to EEAAs technical departments. The aim is to allow it to support and manage the regional outposts while contributing to the planning and implementation of local initiatives of national significance.

### 5.6.3 *Objectives, Outputs and Implementation Strategy*

The vision for this component is a situation where regional branch offices are well established and equipped, enabling the EEAA to carry out its functions at the local level and effectively service decentralised institutions involved in environmental management.

**The immediate objectives are*:***

- EEAA able to undertake their decentralised environmental management mandate

- Selected RBOs able to fulfil their mandates according to Law #4/94

**The major outputs are as follows:**

- CDBA strategy and action plan developed and implemented
- CDBA staff trained according to EEAA training plan (developed under CEM)
- Communication systems and procedures in CDBA vis-à-vis the selected RBOs, CEO office and other EEAA departments functioning
- Reporting systems and guidelines for functions of the RBOs developed (incl. database administration, laboratory procedures etc.)
- Two RBOs, with trained staff, fully equipped to carry out their mandate (incl. field inspection, EA, monitoring, supervision, air monitoring programmes, land use planning, claims management, field equipment/sampling)

**Implementation Strategy**
The CTA and counterpart director with advice from the DEM Danida advisor will determine the phasing in of Danida inputs allowing for flexibility and responsiveness to the developing situation at EEAA. The Danida advisor will be appointed at the start of the SPS in order to assist CDBA plan for the resourcing of the two RBOs that will be identified for this component.

Additional technical assistance, both international and local, will be planned with the CDBA during the component inception phase. This planning will take into account the staffing levels at the central department and the RBOs and their capacity to absorb the relevant TA. Besides the above, the component will be implemented in a two step approach. The first step will include support to and capacity development of the CDBA and one RBO to be identified. The second step will include support to a second RBO to be identified. In terms of the outputs and activities specified in the LFA the component will be implemented based on the following principles:

- An initial focus on developing management capacity and systems within the CDBA in order to enable the CDBA to supervise and support the activities at RBO level, including development of guidelines for the operation of the RBOs.

- Induction and initial management training for RBO staff to ensure coherence in thinking between the CDBA and the RBOs.

- Establishment of operating procedures including creation of databases, laboratory procedures etc. at each RBO to enable the RBO to become fully operational. These procedures will be monitored and revised based on experience. The procedures will take into account the linkages with the EMU´s, the departments in EEAA and other key environmental stakeholders.

- A CDBA strategy and action plan will be developed, which will address the need for liaison with line ministries in the area of decentralised environmental management, and the task of identifying national priority and intervention areas at the local level including coordination of GEAPs, developing Environmental Management Plans for Egyptian regions etc. It will also address the task of establishing co-operation between the selected RBOs and relevant institutions at the Governorate level.

- Training in technical skills related to the specified functions of the RBOs. This will include EAs, inspection and auditing of industries, environmental monitoring, laboratory services, management of complaints etc. This training will be implemented through workshops and through hands-on experience by providing support services to the GEAP process in the EMG component, by providing support services to the industrial sector activities in the ACI component and through demonstration projects specific to the DEM.

- Training and capacity development directed to strengthening of environmental inspectors.

- Development of monitoring programs in relation to air and water pollution in the jurisdiction of each RBO. This will be tied in with the demonstration projects.

The implementation of this component will take into account the ongoing activities in the central Department for Information and Computers and the Egyptian environmental information systems project.

### 5.6.4 *Inputs*

The Danida inputs will include*:*

- Long term Danida advisor to the Central Department of Branches Affairs
- Long term local consultants to the Central Department of Branches Affairs and to the RBOs
- Short term international and local technical assistance in the following areas:
    - Environmental management/Monitoring and Inspection
    - IT/Communication
    - Public Administration
    - EA
    - Field Sampling
    - Economic Instruments
- IT and Database equipment
- Field Sampling and inspection equipment
- Vehicles etc.

The *Egyptian Government inputs* will include*:*

- Adequate staff at the Central Department for Branches Affairs
- Operational costs for the RBOs
- Office space and facilities in CDBA and RBOs

### 5.6.5 *Sustainability Issues*

*Institutional Sustainability*
The DEM component will continue the efforts made during the first two phases of the OSP project. The sustainability of the DEM component will be ensured by provision of adequate numbers of staff and sufficient future budget allocations for both the CDBA and the RBOs to be selected. At present, the capacity of the EEAA to absorb the DEM component is insufficient, due to the limited resources of the CDBA, but the plans to expand the department will eliminate this concern. The present lack of administrative and technical capacity at RBO level will temporarily be mitigated by the attachment of long-term local consultants. The EEAA is currently in a process of hiring staff for coming RBOs to be established. Depending on the progress of staffing the CDBA and the selected RBOs the technical assistance will be phased in flexibly in accordance with this.

The provision of long-term local consultants to the Central Department of Branches Affairs and to the two RBOs for the duration of the component could be considered unsustainable. However, the provision of such consultants is balanced by the need for extra resources in a critical point in time, and the consultants will work closely with permanent staff of these organisations and transfer their know-how over the course of the programme.

The sustainability of the EEAA and the RBOs also depends on these institutions' ability to attract qualified staff and to keep the trained staff. The development of alternative incentive schemes, such as provision of housing by the Government of Egypt etc. should be considered by EEAA to overcome this threat to the institution.

*Financial Sustainability*
Even though the EEAA budget does not specify budget lines for salaries and operating costs for the RBOs and the Central Department of Branches Affairs, the overall budget figures of the EEAA shows that the organisation has emphasised decentralised environmental management.

The EEAA has lately allocated substantial budgets from the EPF to the RBOs, primarily for construction of buildings for the branch offices, including the laboratories. However, it still seems necessary to find ways and means to supplement the financial resources of the RBOs in the future. Since the RBOs will function as service providers, not only to the local authorities, but also to the local communities in general, industries etc, therefore cost recovery mechanisms, where appropriate, will be developed as part of the capacity development of the RBOs.

### 5.6.5 *Poverty Alleviation and Cross-Cutting Issues*

The component will have little direct influence on poverty alleviation. However, enhanced ability to deliver environmental monitoring services and environmental inspection is likely eventually to have an impact on the quality of life of those communities living close to, and working in industry. The component's influence on gender disparity will also be indirect. To increase the potential for direct benefits, the component implementation strategy will include poverty alleviation and gender perspectives by training all staff to incorporate gender sensitisation and strategies of how to support the poorest segments of the population. These actions will be part of the strategic principles for the entire SPS, listed in *Section 5.2.2*.

### 5.6.6 *Environmental Issues*

This component does not involve any engineering work or physical alterations to the environment that could cause adverse effects. There is therefore no requirement to perform EA or produce a management plan.

The activities are designed to secure environmental improvements through promoting better management. Direct benefits may include:

- reduced air and water pollution;
- improved waste management;
- more effective protection of natural resources.

To increase the potential for direct benefits, the component implementation strategy will include consideration of how to maximise the environmental benefits of capacity development by, for example, linking training to ongoing industrial activities, ensuring wide dissemination of lessons learned and sharing experiences with other sectors.

### 5.6.7 *Risks and Assumptions*

The component focuses on providing support to decentralisation through the Central Department of Branches Affairs of EEAA, which will then oversee the establishment of properly funded and staffed RBOs. This assumes that decentralisation of environmental management unfolds as currently intended by EEAA. Effective cooperation

with the Governorates depends on the RBOs and on their relationship with the Governorates' own EMUs being addressed.

The risks are that these conditions remain unfulfilled before implementation of the component, i.e. that:

- the CDBA and the RBOs are not adequately staffed in due time, and the RBOs and the department are not given sufficient operating budgets;

- no clear division of labour between the Governorate institutions, in particular the EMUs and the RBOs, can be agreed upon that is acceptable to all institutional stakeholders; and

- the current efforts to restructure EEAA will result in major changes in the intended set-up for environmental management at the local level.

None of these is likely. Moreover it is clear that government policy will bring about decentralisation in the near future through one mechanism or another. The component has been designed flexibly to support whatever mechanism is selected, thus reducing the risk that unforeseen events will cause resources to be wasted.

## 5.7 Communication for Environmental Management (CEM)

### *5.7.1 Institutional and Organisational framework*

Component implementation will be anchored in the relevant EEAA the Central Department of Environmental Communication and Awareness. CDECA, however, is only one of two departments within EEAA that has responsibilities in this area. The EEAA Information and Computer Centre will be important contributor in terms of the collection and dissemination of environmental data. Other contributors to the component include the EMUs in two Governorates, national NGOs, and local networks of NGOs and CDAs in the identified Governorates for the SPS.

### *5.7.2 Problem Analysis*

The EEAA intends to create an umbrella structure incorporating all environmental communication programmes and focusing on issues such as:

- streamlining of information to be communicated;
- closer partnerships with media professionals;
- clear approval procedures for communication products
- policy guidelines for EEAA public awareness programmes.

Another significant barrier to effective environmental communication in Egypt is the limited availability of reliable baseline data and the restricted access to priorities of decision makers. Steps have been taken to improve this situation through, for example the EEIS.

### *5.7.3 Objectives, Outputs and Implementation Strategy.*

The component will support EEAA communication initiatives by developing showcases on how to develop environmental messages. Close partnerships with environmental journalists and media professionals will be built, and communication strategies, concepts, and idea catalogues will be developed, that feed directly into EEAA policy guidelines. This will build on the initiatives started in the Danida funded Environmental Education and Training Project.

To overcome restricted access to information and decision makers, the component has been designed both to provide a service to the officials already working with Danida through other SPS components, and to likewise receive support from them. Thus Danida will, through this component, provide materials to meet demands generated during the implementation of other components, while simultaneously receiving data for message development generated by those components.

**Objectives**
The foremost goal of the component is to help decision-makers, at both national and local levels, selected industries, and NGOs/CDAs to take action to improve the qual-

ity of life of some of the poorest and most vulnerable groups in Egypt. This will be achieved by involving these groups in a participatory environmental management process, fostering partnerships with local NGOs/CDAs, co-ordination and collaborative work between the different agencies and segments of the society, and improving availability of and access to environmental information.

**The immediate objectives are:**

- Dissemination of environmental information to support the priority environmental strategies of the EEAA, EMUs, and other partner stakeholders.

- Enhancing the awareness of environmental issues and the capacity of decision-makers and implementers in the EEAA, governorates, and industrial sectors.

**The outputs are:**

- Relevant EEAA and EMU staff trained in communication methodologies and desk top publishing

- In support of the other SPS components, technical EEAA departments, and EMUs, at least 10 media packages targeting decision makers produced.

- Decision makers capacitated to use environmental information and messages for environmental management.

- Financial strategy for EEAA and EMU environmental communication programmes developed and implemented.

- In support of the other SPS components, technical EEAA departments, and EMUs, NGOs/CDAs, local communities, and selected industries in two Governorates capacitated to use environmental information and messages for environmental management.

- A NGO Window for funding of relevant NGO activities that are not covered by the Environmental Management in the Governorates Component established.

**The implementation strategy** is based on the following principles:

- That the communication support activities will be focused on raising awareness both with the public and with partner organisations. This awareness raising will be implemented through the development of appropriate media packages, training support materials, and training activities.

- That the communication-support activities provided through CEM will be based on the communication, awareness, and training needs identified by the other SPS components, the technical departments of EEAA, the EMUs, and other significant stakeholders involved in the implementation of the SPS.

- That capacity development in the CDECA will be a key output of the component. This capacity development will build on the initiatives developed under EETP, and will build the in-house capacity to prioritise, plan, and budget a communication support strategy. This will include developing skills in researching and defining messages, production design techniques, pre-testing messages and methods, impact monitoring, etc. Technical production requirements, such as video and TV production, will be out-sourced. The management of these contractual arrangements will also be a key focus of the capacity development.

- That the development of media and training packages will be compatible with the participatory planning and community-based management strategies being employed in the EMG and ACI components. Training support activities will be designed to assist the EMG and ACI components develop capacity in these approaches.

- That cost effectiveness and cost recovery are key guiding principles in the design of the communication-support activities. Studies will be undertaken to assess the feasibility of soft sponsorship, and assist the CDECA, governorates, and industry develop appropriate financial strategies.

- That a poverty orientation and gender sensitive approach will be a central feature of the communication-support activities. In order to strengthen this approach relevant socio-economic studies on environmental management with selected target groups will be undertaken.

### *5.7.4 Inputs*

**Danida input**

- Danida adviser to the Central Department of Environmental Communication and Awareness.

- Local long term advisor on communication and management to the Central Department of Environmental Communication and Awareness.

- Short-term specialists for training (national and international).

- Short-term specialists for development of formats and communication materials (national and international).

- Equipment (video, scanner, computers, desktop- and multimedia software, printers, vehicles).

- Funds for production of at least 10 media packages.

- Funds for NGO Window and to organise workshops

**The Government of Egypt** will support the Component by providing a minimum of:

- a Component Partner Director based in EEAA: he or she should have a Bachelor's degree in communication, journalism, or social science and at least ten years of related experience; or a higher degree (M.Sc. or Ph.D.) in one of the above disciplines and five years of experience;

- two technical staff members who should have Bachelor's degrees in a social science discipline and five years of related experience;

- a technician specialised in desktop publishing, a secretary in EEAA with appropriate secondary school diplomas; and

- office space for four people in EEAA with desks, chairs and telephones.

### *5.7.5 Sustainability Issues*

*Institutional Issues*
Through the creation of a pool of expertise, the techniques and tools developed during component implementation can be employed and further elaborated long after completion of the SPS. There is also potential for replication of the CEM communication-support activities in other Governorates, particularly as there will be a focus on low cost communication methods.

*Financial Issues*
Financial sustainability for national media coverage will be secured through the development of a financing strategy involving soft sponsorships from other sources, including the private sector. A financial strategy might also comprise the possibility for EEAA and EMUs selling communication products and services. With the FEI as a partner in the SPS, good opportunities to establish soft sponsorships from the private sector are anticipated.

### *5.7.6 Poverty Alleviation, Cross Cutting incl Environmental Issues*

The component is expected to support vulnerable communities and groups indirectly by supporting environmental management activities in the governorates. Through the GEAP process, information will be provided to decision-makers and implementers in the EMUs, NGOs, other partner organisations, and local communities. Support will also be provided indirectly to vulnerable communities and groups by making environmental information at all levels of the Egyptian society.

At the governorate level, *the component, through its support to the EMG Component,* strengthens poor people's access to information and knowledge. This is expected to encourage participation in environmental management at the community level. Recent studies by the Egyptian Government, on the impact of education and awareness raising efforts, support this assumption by indicating that people, especially poor people, nowadays have improved access to skills outside the context of family. Figures from

the Human Development Index, published in 1996, indicate an increase in 'primary intake of education' from nearly 69 percent in 1960 to over 100 percent in 1994 [6]. The improved intake of education counts as much for women as for men for primary and secondary enrolment ratios. The CEM Component and the EMG Component together have strong potential for promoting gender sensitive approaches, by designing communication materials targeting men as well as women.

The education materials, which are currently available for rural and uneducated people, are not as effective as they could be. The CEM will pay special attention to involving the rural and uneducated part of the population by designing communication programmes that refer more to experiences in the daily life of the target groups. The parallel support provided by the EMG component to decision makers, as well as NGOs/CDAs and local communities, is expected to have a positive impact on good governance by supporting transparency and sharing of knowledge in the decision making process.

The Component also supports public participation by providing environmental information to NGOs and CDAs. The Component will in this way contribute to capacity development within NGOs and CDAs. This is expected to improve their understanding of their rights and which will give them improved access to resources and knowledge necessary to take action.

### *5.7.7 Risks and Assumptions*

A major obstacle to effective implementation of the component is the existing lack of co-ordination between the EEAA and the various partners at the governorate level. The establishment of EMUs in the two target governorates, i.e. Aswan and Beni Suef will help to strengthen this relationship. Whilst the EMG Component will take the lead in helping to consolidate this working relationship, the CEM Component will play an important supportive role.

A significant barrier regarding environmental communication in Egypt is the limited access to reliable environmental information and the general lack of awareness regarding the priorities of environmental decision-makers. The component responds to these barriers by providing a service to the other SPS components as well as to key stakeholders in the EEAA. It is expected that the other SPS components will contribute significantly to the provision of environmental information, such as information on industrial compliance with Law 4/94, solid waste management problems at the governorate and community level, and problems related to shore protection. Furthermore, other donor projects in EEAA, such as the EEIS project, are helping EEAA improve the flow of information.

Another obstacle, as perceived by the EEAA, is the potential gap between the Environmental Education and Training Programme, funded by Danida, which ended in December 1999, and the start of the SPS. The gap might create a situation where the momentum built up by the EETP will be lost and the junior staff recruited will have to

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([6]) The figure of higher than 100 percent for the primary intake in 1994 relates to the fact that some students fail and are enrolled twice.

work for the present without formal technical courses and on-the-job-training. The majority of staff in CDECA has less than five years experience, and ensuring that they receive the appropriate support and training is essential to EEAA achieving its communication and public awareness goals.

A key part of the CEM Component is targeting decision-makers, and enhancing their capacity to utilise environmental information and data. Senior management in the EEAA, and in the governorates, are few, and many demands are made on their time. Whilst the goals of the CEM Component may be perceived as important by EEAA management, it will not necessarily be given priority in terms of their time availability. The challenge will be to make information available in a form that is immediately useable to decision-makers, thus winning their acceptance and support for further initiatives.

Implementation of the CEM is based on a number of assumptions - the most critical ones are as follows:

- Presently, there are too few professionally qualified staff in the CDECA to manage the component effectively or to sustain and develop momentum after the support is finished. Although the need to improve staff qualifications and management capabilities is a strong argument for implementation of the CEM component, there is a risk that EEAA will fail to recruit sufficient staff or that suitable applicants will not be attracted to the position. The risk is partly mitigated through the CEM component as it increases the demand for qualified staff and as it provides more interesting work opportunities. It remains a critical assumption that this will indeed result in attracting and retaining more qualified staff at EEAA.

- A second critical assumption is that there will be continued government willingness to encourage and facilitate the activities of environmental NGOs and CDAs. There is a risk that, if these organisations begin to be seen as being too demanding of the establishment or critical of public sector bodies, their freedom of action and access to funds may be curtailed.

- A final critical assumption is that the EMUs, NGOs and CDAs situated in the two selected governorates respond positively towards collaboration with the EEAA.

## 5.8 Environmental Management in the Governorates (EMG)

### *5.8.1 Institutional and Organisational Framework*

The basic structure for local administration in Egypt comprises 26 governorates, each headed by a Governor appointed by the President. The governors are key figures in all local decision making and have a major influence in formulating environmental initiatives and directing their implementation. Offices of the Governor in two governorates, Aswan and Beni Suef, will be the partner organisations responsible for implementation of this component.

The component will support further development of Environmental Management Units (EMU) in the Aswan and Beni Suef governorates. The EMUs should be directly affiliated with their respective Governor's office and operate under the administrative supervision of the Secretary General (the Governor's chief executive officer), with clear mandate of co-ordinating all Governorates environmental work.

A great part of the work of the EMU requires close collaboration with other departments of the Governorate. Co-ordination can be achieved through the Governorate Executive Council which is headed by the Governor, and which meets on regular basis. The EMU should also be represented in the Governorates Licensing Committee.

It is the responsibility of EEAA to coordinate environmental management in governorates and ensure reasonable consistency of approach. The EEAA is expected to develop a GEAP Advisory Office (GAO) that will take part in the Steering Committee established to implement the component, will co-ordinate component activities and the wider remit of EEAA and will benefit from a valuable opportunity to support dissemination of the lessons learned from this component. When the GAO is established, the component will assist the GAO to undertake the additional work generated for it by component activities. As a window of opportunity, the SPS may consider further support to the GAO, when the GAO is fully established and adequately staffed. This should be decided during the Inception Review or during Annual Sector Review.

### *5.8.2 Problem Analysis*

The Environmental Objectives and Policy Directives, issued in August 1998 by the Egyptian Minister of State for Environmental Affairs and EEAA, emphasised increased decentralisation of environmental management to the Governorate level as a priority. In response, several governors, including the Governors of Beni Suef and Aswan, have prepared decrees mandating the establishment of an office, to be affiliated to the Governors Office, that will carry out environmental management functions. Typically, the resources available to staff these offices include experienced officials from the Governorate Administration and academics at higher education establishments. These sources provide a pool of scientifically trained and locally knowledgeable personnel, but familiarity with environmental law, and modern environmental management tools is limited.

There is a substantial need for support to develop capacity, particularly in the following areas:

- Environmental monitoring and administration;
- Interpretation and enforcement of the law;
- Project identification, planning and implementation;
- Financial and material resource mobilisation.

### *5.8.3 Objectives, Outputs and Implementation Strategy*

This component will focus on strengthening environmental management in the Governorates of Aswan and Beni Suef, with the objective of providing technology, infrastructure and strong local institutions to assist the poor in improving and maintaining the quality of the environment in which they live and work. This will be achieved through a strong participatory process for generating a Governorate Environmental Action Plan (GEAP) that will provide a mechanism for mobilising stakeholders and selecting priorities.

The GEAP process will take a pragmatic approach to environmental action that places people's views at the centre of the planning process. Elaboration of an environmental status description will form a starting point for the planning process. Besides providing an overview of the environmental situation in the governorate, it will address special local problems, which people wish to see included. They may not be the key environmental issues in every case, and some issues may not meet Danidas classification of environmental projects (water and sanitation is, for example, expected to be a major concern at community level), but the central premise will be to treat these as building blocks for addressing broader environmental concerns which affect communities and businesses. In this way, the GEAP process will promote partnership between stakeholders including line Ministry departments, communities, industries and the governorate administration.

**Objectives**
The immediate objectives are as follows:

- The EMUs in Aswan and Beni Suef enabled to carry out their mandated environmental management functions

- Participatory GEAP process functioning in Beni Suef and Aswan that involves people at the community level in identifying and rectifying local environmental problems through community based and replicable projects

A participatory process for generating a Governorate Environmental Action Plan (GEAP) will be established in the two Governorates. This will serve as a mechanism for mobilising stakeholders, raising awareness, undertaking improvement projects and creating channels and networks for communication. In parallel, assistance will be provided to the EMU so that it is equipped to manage the GEAP process, while carrying out routine environmental management activities, i.e. enforcing regulations, monitoring the state of the environment, implementing national policies and co-ordinating investment and development activities within the governorate.

**Major Outputs**
When the component begins, the EMUs in both Aswan and Beni Suef will have been established for only a short time, and will urgently require equipment and training. The component envisages close cooperation with community-based organisations, but there will be little experience of this and the organisations may not be ready or able to participate fully. The necessary outputs of the component will include the following:

- Staff trained in accordance with Human Resources Development plan (HRD);

- Management and information systems in place to handle and disseminate information;

- The working relationship with EEAA elaborated to ensure that activities are complementary. Therefore, updated directives should be issued setting out responsibilities of EMU, RBOs; and systems for communication and collaboration developed;

- Sustainable funding secured for the EMUs so that their continued operation after the SPS has finished is assured. This includes allocation of a government budget line, development and testing of cost recovery mechanisms, and the piloting of fund raising activities;

- The EMUs equipped for field sampling, routine activities, and information management and dissemination. This involves a needs analysis and procurement of equipment and training in its use and maintenance.

- A CDE programme established that will identify and recruit stakeholders, assist their participation in a participatory process through awareness raising, training, education and, where appropriate, grants for equipment;An Environmental Committee with specialised working groups established that will involve community groups and select community-based projects to be implemented;

- GEAP document in each governorate produced, disseminated and regularly updated based on stakeholder priorities;

- Implementation of GEAP priorities, and participatory and community based environmental projects carried out.

- NGOs/CDAs, local communities, and selected industries in two governorates capacitated to use environmental information and messages for environmental management.

- Experience replicated in other locations (within and outside the governorate)

**Implementation strategy:**
The overall implementation strategy is based on the following key points:

- To provide substantial institutional support to the EMU's of the governorates of Beni Suef and Aswan both with respect to environmental planning and management expertise and communication and social survey expertise as part of the wider CDE approach to decentralising environmental management to the goveronate level.

- To focus and strengthen the CDE activities by linking them directly to demonstration and community based projects through a consultative and participatory process involving a wide range of stakeholders in the prioritisation, selection and implementation of activities and projects. This to be achieved through initiating a GEAP process beginning by identifying and mobilising stakeholders and by determining the 'state of the art' for the environment in each governorate.

- To develop capacity to NGOs/CDAs, local communities, and selected industries in the two Governorates early in the process to enable these groups to use environmental information and messages in prioritising environmental issues.

- To carry out cleaning up of high priority hot spots or other highly prioritised environmental initiatives within the first 12-18 months of the program, which will keep up the positive momentum in the governorates and local communities, while the longer term community based projects and activities are generated and prepared for implementation.

- To involve EEAA in oversight and monitoring of activities (including through the RBOs being supported by the DEM component. They can thereby contribute relevant experience and ensure that their general policies are being given due consideration, whilst disseminating lessons learned to other Governorates.

- Using economic analysis to promote long-term sustainability by exploring financial instruments (cost recovery charging, co-financing arrangements following willingness to pay and affordability surveys) and, where feasible, using local consultants and technology that is manufactured and/or can be maintained locally.

- To use international consultants in short intensive bursts, rather than in resident positions in the governorates so that the EMU is encouraged to initiate and carry through actions and remain self-reliant while always having relatively easy access to expert advice.

### *5.8.4 Inputs*

The grant assistance to be provided amounts to some 101 million over 6 years. This will provide support to the EMUs in the form of local and international consultants, office and field equipment and training. In addition, there will be funds for 1-3 community based projects (average 300,0000 DKK) and 1-4 large-scale demonstration projects (average 1 Million DKK) per year in each of the two governorates.

The EEAA has appointed a GEAP Advisor in its Cairo Headquarters whose job it will be to guide governorates in the fulfilment of their environmental management obligations and ensure reasonable consistency of approach between the governorates. The main Egyptian contribution will however come from the governorates, who will:

- establish an EMU with a clear mandate to co-ordinate all the governorates environmental work;
- appoint full-time staff to the EMU including, as a minimum, a director, two graduate technical staff, a technician, a secretary and a driver;
- provide office space for at least 8 people, with desks, chairs and telephones.

### *5.8.5 Sustainability Issues*

The strategy for the component is to create a self-sustaining EMU and participatory GEAP process in two governorates. Investment should in most cases be seen as "seed money" that will enable the implementation of an activity that is cost-effective, affordable and efficient, and that would normally be self-financing. In order to achieve a financially sustainable, affordable and realistically achievable programme, the component will focus on providing affordable and cost-effective environmental services, raising finance where possible, and using local equipment and services.

The EMU will form part of the Governor's office ("Diwan"). Salaries in these posts are relatively low, and so to retain the staff it will be essential to develop a sound organisational structure with productive work activities and career development opportunities. Therefore, timely support from Danida in setting up the EMU, and funding showcase projects, will contribute significantly to the long-term sustainability of the organisation.

### *5.8.6 Poverty Alleviation and Cross-Cutting Issues*

Aswan Governorate contains areas of extreme poverty that could benefit greatly from this component, while in Beni Suef Governorate, one third of the population (43%) is characterised as poor and almost 11 % are ultra poor.

In each governorate a socio-economic study will be prepared to 1) establish the situation with respect to poverty and gender related to the environment in the districts and villages; 2) examine the causal relations between poverty, environment, and gender. 3) make recommendations on issues to take into consideration to ensure a participatory and effective GEAP process and design/implementation of community based demonstration projects. To the extend possible the studies should be based on accessible existing information.

The participatory GEAP process is a socially inclusive instrument for identifying problems that affect the poorest, while the community based showcase projects can develop capacity and make a significant improvement to the quality of life of poor and marginalized groups.

Poverty in the governorates is found particularly in squatter communities, especially in female-headed households and in the rural communities. The component has potential to address poverty in these groups by ensuring that showcases will include

them and making sure that women and women's groups are well represented in management and decision making.

Experience from around the world suggests that many aspects of environmental management are most effectively implemented at the local level. The devolution of environmental decision making to local administration will, in itself, constitute good governance. In addition, the use of the GEAP process as a socially inclusive planning tool is expected to promote awareness among traditionally under-represented groups and facilitate their participation in an ever widening range of local decision making.

### *5.8.7 Environmental Issues*

During the Inception Phase an Environmental Management Plan will be prepared according to Danida Guidelines. The component focuses on Capacity Development for the Environment (CDE) and small-scale demonstration projects. Most of the activities (for example training, awareness raising, procurement of office equipment etc.) will not involve any physical disturbance of the environment that might merit a "B" or "C" classification[7].

Showcases/demonstration projects will be designed to secure an overall improvement in the environment, and they will still be subject to Environmental Assessment (EA) if potentially significant adverse effects could result from preparation activities or during implementation. There may well be environmental remediation projects that involve earth works, diversion of wastewater or transport of hazardous materials. The clean up of Kima Canal in Aswan, for example, would involve all of these things.

Demonstration projects will be screened and assigned an environmental category according to Danida criteria. If any fall into categories B or C, an EA will be commissioned by the component managers and undertaken by competent local consultants. The potential for training afforded by any such EA will be fully exploited and followed up. This process will be guided by an Environmental Management Plan (see Annex A) to be developed during the inception phase according to the Danida publication: "Environmental Assessment in Sustainable Development", December 1999.

### *5.8.8 Risks and Assumptions*

The component relies greatly on the immediate implementing agencies (i.e. the EMUs of the Governorates), and on their commitment and ability to raise environmental awareness and involve CDAs and other community groups in participatory environmental projects and planning processes.

The main risk to the component is that a governorate does not allocate and maintain the required staff or allocate adequate funds for future operation of the EMU. This risk has been mitigated by the selection made with respect to the partner governorates. In both governorates, the Governors have shown a strong commitment to participate in all aspects of the implementation of the component, which is crucial to its prospects of success.

[7] According to Egyptian Environmental Assessment schemes category "A"-projects will not require EA's, whereas "B"-projects will need parcial and "C"-projects full EA's.

## 5.9 Achieving Cost-Effective Compliance with Environmental Regulations within Industry (ACI)

### *5.9.1 Institutional and Organisational Framework*

Following careful review of other possible organisations, and intensive consultation with a wide range of stakeholders, it was agreed to anchor the component within the Federation of Egyptian Industries (FEI). By law, all industrial companies that have more than 10 employees or capital of more than LE 10,000 must become members of FEI. Consequently, it has nearly 19,000 members, the majority of which are small and medium enterprises (SMEs) organised in 14 industrial chambers, closely reflecting the structure of the industrial sector in Egypt.

FEI is in a transition to become a private NGO. Support from USAID to the FEI ceased by the end 1999. FEI is now an independent, self-financing organisation, with an elected Chief Executive and a voluntary membership. According to plans, by spring 2000 more than 150 large industries are to become direct members, in addition to the industrial chambers.

FEI has recently established an Environmental Department, to provide its members with advice on issues such as compliance with Law 4/94, and has signed a Co-operation Protocol with EEAA. This component will further develop FEI's initiative in this area, by supporting the establishment of an Environmental Compliance Office (ECO). ECO will provide an information service and serve as a link between the industry, the Egyptian Technical Consulting Enterprises, EEAA, and various financing facilities.

The representation of the FEI at local level is restricted to its two branch offices (in the cities of Alexandria and Tenth Ramadan). Co-ordination with the EMG component will extend its capacity to identify pilot projects and dissemination relevant experience to two additional governorates.

### *5.9.2 Problem Analysis*

The industrial sector contributes approximately 21% of Egyptian gross domestic product. Most large-scale enterprises are publicly owned, while private industries tend to be SMEs established during the last fifteen years. As part of an ambitious program of public sector restructuring, it is expected that many large industrial enterprises will be privatised during the next 5-10 years. However, in order to make these enterprises attractive to investors, environmental liabilities have to be brought under control. An important step towards this will be to achieve compliance with environmental regulations, but it will be essential to ensure that the private sector also complies, so that:

- a level playing field is maintained;
- the SME sectors are in compliance with current regulations;
- the potential environmental benefits of industrial compliance are realised.

- Egypt has the environmental laws and executive regulations to limit industrial pollution, but compliance is infrequent and enforcement sporadic and inconsistent. Strict enforcement alone can only remedy the situation at large and intolerable social costs. Therefore, the best policy is to raise industry's awareness of their environmental responsibilities and obligations, increase their access to cost-effective cleaner production options, and create market based incentives for compliance with regulations.

### *5.9.3 Objectives, Outputs and Implementation Strategy*

At the end of component activities, the FEI will be supporting at least three sectors of industry to be identified during the implementation of the component. Services include advice, training, and assistance with access to funds for environmental improvements and sector models demonstrating cost-effective good practice. Production methods in these sectors will have improved and EEAA will be encountering improved levels of compliance. FEI will gradually take over the financing of the ECO staff, as Danida funds for ECO staff will be phased out. After six years, the office is self-sustained with regard to salaries, office space, and secretariat, i.e. ECO will be funded through FEI. The long-term perspective is that each of the major industrial chambers has their own liaison officer at ECO, which will be a focal point for cleaner production information for industry, EEAA and other stakeholders. Egyptian technical consultants has worked with international consultants during the implementation of the component, and at the end, they promote and implement cleaner production (CP) in the industry on their own.

**Objectives**
The objective of the component is to assist industry to improve compliance with environmental regulation through Cleaner Production. Cleaner production is the combining term used to describe:

- The cleaner technologies involved (reuse and recycling of material, process modifications, changes to input specifications etc.),

- End of pipe abatement equipment (filters, effluent treatment plants etc.), and

- Good environmental management (good house keeping, monitoring of emissions, safe working environment, resource and energy savings etc.).

The three immediate objectives needed to achieve the development objective are:

1. Environmental Compliance Office (ECO) at FEI serves as a link between the industry, the Egyptian technical consultants, EEAA, and financing facilities/institutions.

2. Awareness and usage of cleaner production in at least three sectors (Chambers) of the Egyptian industry.

3. Egyptian technical consultants promote and implement cleaner production in the industry.

**Major outputs**
The Environmental Compliance Office (ECO) is established at FEI, and is financially self-sustained through FEI. ECO provides services to industry in relation to cleaner production

About 90 industries have implemented an environmental management scheme, 15 industries have implemented cleaner production, and about six industries are models for their sector. A financing facility provided loans and grants for these environmental management schemes and cleaner production projects. EEAA experiences the increased awareness, improved environmental management, and cleaner technologies by improved levels of compliance.

The capacity of the Egyptian technical consultants has been strengthened, which can be seen when Egyptian technical consultants assist the implementation of cleaner production in three industrial sectors.

**Implementation Strategy**
The implementation strategy for the ACI-component is based on the success of eight blocks of activities, carried out in sequence or in parallel:

- Establishing an environmental compliance office (ECO) at FEI at the start of the component. Identifying three industrial sectors to participate in the component by the ECO of FEI.

- Awareness raising of environmental management schemes (EMS) by the ECO

- Implementing environmental management schemes in approx. 90 enterprises, based on environmental action plans designed for each enterprise.

  The guiding principles for the selection of sectors are:

  - small and medium sized private enterprises,
  - industries with serious pollution problems situated in remote and/or poor areas of Egypt,
  - industries mainly employing poor people and female workers,
  - sectors with a long-term potential for survival,
  - and sectors where Danish expertise is available.

- Determining the best performing among the 90 industries where environmental management schemes have been developed, eligible for support from the financing facility. The ECO officers will have continual contact with these industries and will assist in filling in applications to the fund.

- Establishing a financing facility to provide loans and grants for larger investments in cleaner technology and end-of-pipe solution to comply with Law 4/94. Estab-

lishing mechanisms to determine, the support that the SMEs will receive. The ECO office will develop monitoring practices to collect the experiences gained to continuously improve the entire process.

- Developing a financial, long-term sustainability strategy for ECO. This will start 2-3 years into the programme.

- Involvement of Egyptian technical consultants in all relevant activities throughout the component. International advisors will support them to perform tasks for which the Egyptian technical consultants need training or experience. The training will consist of mostly hands-on and learning by doing experience. Substantial funds are allocated to these activities through the ECO.

### *5.9.3 Inputs*

The Danida inputs will include:

- A resident international industrial/technical environmental manager (6 years), and medium to short term technical assistance in cleaner technologies, environmental audits and management, information technology, communication and awareness and training.

- Funding for ECO employment of three full-time staff member, industrial sector specialists ("long-term, local technical assistance"); paid in full for three years, then gradually decreased to zero after 6 years.

- Funds and short-term consultants to assist in the formulation of industrial environmental action plans, implementation of environmental management schemes, and design and implement the cleaner technologies. Local consultants will work alongside, and eventually take over the roles of all the international consultants.

- Funds and management resources for a financing facility to support in cleaner production.

- Office equipment, IT and Database equipment, vehicles etc.

FEI will provide:

- A full time head of the ECO.

- Three full time ECO staff members, one for each of the three industrial sectors, gradually paid for after 3 years and paid in full after 6 years.

- Office space, telephone lines for the Management Office and consultants for local calls.

- Access to the administrative facilities of FEI.

### *5.9.4 Sustainability Issues*

*Technical Sustainability*

The technical standard of Egyptian industry is very fragmented, ranging from enterprises using state-of-the-art technology, to enterprises with semi-obsolete equipment housed in primitive premises. However, good environmental management does not necessarily require a high degree of technological sophistication. There is potential for the application of simple solutions that can have a great effect on environmental performance. Therefore, no major technical obstacles to the implementation of the component are anticipated. Furthermore, due to EEAAs increased attention to pollution prevention and enforcement of environmental regulations, awareness of the need for cleaner technology is increasing and demands for these services are likely to continue to grow.

There is an Egyptian resource base to advise on the advantages of cleaner production, but it has very limited "hands-on" experience. The component will develop this resource base and reinforce it with expertise from Denmark, where experts and manufacturers have developed the technical capability to supply services and equipment for the implementation of this component.

*Institutional Sustainability*

Although the FEI is undergoing a profound and occasionally problematic transition from public to private sector, the new management understands the necessity of change and is committed to transforming FEI into a self-sustaining service provider. Management has been replaced with former senior managers from industry and wide-ranging staff changes have been implemented. With financial support from USAID, FEI has improved communication with and the service provided to its members.

*Financial Sustainability*

The financial situation of FEI is uncertain at present, after the support from USAID has ceased. FEI anticipate to be financially self-sustained by the middle of 2000. FEI is the only national industrial organisation, and it has every opportunity to sustain itself at a reasonable level as a fully privatised and self-financing organisation. They are already paid 40% of the total income by the industrial chambers from member fees. FEI is working to ensure financing from other sources as well, such as direct membership fees from major Egyptian companies.

At present, very skilled staffs are employed at FEI, and they are paid salaries up to five times higher than government employees are. Salaries have to remain at a sufficient level to retain qualified staff, but the financial burden could become a constraint on the speed of transition and subsequent growth of the organisation. The component includes an activity to develop a financial sustainability plan for the ECO.

### *5.9.5 Poverty Alleviation and Cross-Cutting Issues*

Poverty alleviation, gender, and governance issues are not the direct targets of this component, but there is a potential for profound indirect effects. Polluting industries are often placed in marginal areas, where also disadvantaged and poor people live. The component will improve the livelihood of people living near the industry (often the poorest segment of the population). Reducing the emissions from the production and cleaning up the vicinity of a factory may benefit these groups. Improved working conditions for poor workers, including children and women at a factory applying an effective EMS can be an indirect effect of the programme as well.

These issues are important priorities when selecting among industries to enter the component. To maximise the potential benefit to poor and women, sectors should be targeted that:

- are highly polluting and poorly regulated;
- tend to be located within poor communities;
- employ many women or make use of child labour;
- have occupational health and safety problems.

The component contributes to the creation of a non-governmental body that will disseminate information, create networks for disseminating good practice, and enable investment in cleaner production. This is a significant contribution to CDE and the improvement of governance in the environment sector.

### *5.9.6 Environmental Issues*

The component focuses on institutional development and cleaner production in industry. This should not involve constructions or disturbances to the environment that might merit a "B" or "C" classification for environmental assessment[8]. However, there will be significant opportunities for environmental improvement. These can be maximised by:

- selecting industries to be models that are presently giving rise to significant environmental pollution;

- working closely with governorates to ensure that the installations targeted are priorities in the GEAP.

Sector models may prompt an EA classification "B" or "C". If so, an EA will be commissioned by the component managers and undertaken by competent local consultants. The potential for training afforded by any such EA will be fully exploited and followed up. The process will be guided by an Environmental Management Plan (see Annex A) to be developed during the inception phase according to the Danida

[8] According to Egyptian Environmental Assessment schemes category "A"-projects will not require EA's, whereas "B"-projects will need parcial and "C"-projects full EA's.

publication: “Environmental Assessment in Sustainable Development”, December 1999.

### *5.9.7 Risks and Assumptions*

The main risks come from the uncertainties regarding industry, Egyptian technical consultants, FEI and policy issues of the central government (EEAA) and the governorates. The most important assumptions may be summarised:

- Increased attention, pressure and incentives on Egyptian enterprises to comply with environmental legislation.

Environmental compliance is in most cases an increased financial burden on industries, particularly if marked based tools are not used to give incentives to comply (green taxes, tax lifting for environmental investments etc.).

- Enterprises are interested in the activities and services provided through the component.

The Egyptian Government and Danida have signed an agreement. FEI has signed a component agreement, but neither the industry nor the workers associations, or other stakeholders have any knowledge of the agreement at the time of inception.

- Egyptian resource base has available experts and staff and will participate in component activities.

Egyptian technical consultants have not signed any agreement either, but at least they can build new competence and get business at the same time. There is apparently a great variation in the quality of the Egyptian technical consultants, but in previous projects, Danida has been able to find qualified consultants

- FEI will develop into a sustainable national industrial organisation representing Egyptian private enterprises, having a qualified staff and a management supporting the ECO activities.

FEI management has signed an agreement to participate in the component of the sector programme, so in reality the risk is limited to the financial situation and the availability of qualified staff. Giving the fact that salaries at FEI are quite high compared to other job possibilities qualified staff should be attracted to the ECO offer of permanent job positions. The financial sustainability depends on the willingness, pressure, and incentives created for industry to contribute to FEI. By law, they have to be members of FEI, but enterprises should feel that they get value for their member fees, if FEI is to be regarded sustainable.

## 5.10 Environmental Information and Monitoring Programme (EIMP)

### *5.10.1 Institutional and Organisational Framework*

The Egyptian counterpart for the EIMP is the EEAA. The EEAA will undertake all contractual arrangements with other Egyptian institutions involved in the component. The component will mainly support the Environmental Quality Department within the EEAA. The EIMP will also involve several other Egyptian institutions, including monitoring institutions and a reference laboratory.

A Steering Committee (SC) has been established for the EIMP. This SC is chaired by the EEAA, and includes representatives of Danida and the EIMP management. The Review Mission of September 1997 pointed out that the SC's responsibilities and work has not been clearly defined, and that the SC has not taken action on issues such as counterpart contributions to the programme, timely selection of monitoring institutions and import procedures for equipment provide by Danida. Working Groups under the SC have been established, but they have been too large to produce any significant outputs. Although initially foreseen, an Egyptian Environmental Monitoring Committee (EEMC) has not been established.

It is recommended that under the remainder of the EIMP, the role and responsibilities of the SC are reviewed and more clearly defined. The Review Mission recommends the cancellation of the Working Groups, and the abandonment of the idea of setting up the EEMC. The monitoring institutions should not be represented in the SC. The role of the SC should also be reviewed in the light of the inclusion of EIMP as a component of the SPS. It is possible that the EIMP Steering Committee can be absorbed by the SPS Steering Committee.

### *5.10.2 Problem Analysis*

The Government of Egypt has developed the regulatory framework for pollution control by passing the Law on Environmental Protection and by issuing executive regulations. However, enforcement is inadequate in relation to the lack of knowledge concerning pollution sources, the quality of ambient air and water, and the relations between pollution sources and ambient quality.

For instance, the lack of adequate environmental quality data at the start of the component made it difficult to estimate whether current emissions standards are sufficient to meet ambient objectives. EIMP has been designed to meet the need for more adequate monitoring data in order to improve the effectiveness of pollution control in Egypt.

### *5.10.3 Objectives, Outputs and Implementation Strategy*

EIMP aims at improving environmental quality in Egypt through enhanced knowledge and understanding of environmental quality and pollution sources and their interaction.

Knowledge of the pollution sources and the resulting environmental impacts is a prerequisite to reducing pollution and protecting the environment in a cost-effective way.

Thus, a monitoring programme for pollution sources and ambient quality is essential in order to define where emissions need to be reduced.

The EIMP will initiate a systematic monitoring of pollution sources and environmental effects. Such systematic quantification is a prerequisite for the Egyptian authorities to be able to undertake cost-effective pollution control measures, and to enforce Law 4/94.

Five tasks have been initiated under the EIMP, each with their own specific objectives:

| EIMP task | Objective |
|---|---|
| Institutional Support to EEAA/EIC | Enhance knowledge of environmental quality and impacts of pollution sources at EEAA |
| Coastal Water Monitoring | Enhance knowledge of coastal water quality at EEAA |
| Air Pollution Monitoring | Enhance knowledge of air pollution, its causes and consequences |
| Data Base of Pollution Sources (discontinued after review) | Enhance knowledge of point sources pollution |
| Reference Laboratory for Standardisation and Quality Assurance | Improve consistency in quality of data provided to EEAA/EIC |

Continued and effective implementation of the EIMP would require a clear division into three different programme phases. These phases have been identified as follows:

- a ***commissioning phase*** of 1 year, which is mainly concerned with building up systems an procedures and initial training already completed;

- a ***consolidation phase*** of 2 years, which will focus on developing Good Laboratory Practice through training, developing laboratory routines and audits to be completed by June 2001;

- a ***phasing-out phase,*** which will concentrate on establishing routine operation and routine lab procedures and on gradually improving the quality and reliability of monitored data to be completed by June 2004.

Detailed implementation strategies and plans have been presented in five task documents. Before the start of each phase, detailed action plans were to be drafted by the Team Leader.

Each task has different outputs during the different phases of EIMP implementation. The outputs range from the installation of monitoring and field equipment and computer hardware/software, to training, QA/QC systems and audits, as well as inputs to the Egyptian 'State of the Environment' report.

### *5.10.4 Inputs*

**Inputs by Danida**
Danida inputs include international (Danish) and local technical and management expertise, equipment (computer hardware and software, monitoring and field equipment) and operating costs. Total Danida inputs, amounting to DKK 86.6 million are broken down as follows:

| | |
|---|---|
| Danida consultants: | DKK 35.1 million |
| Reimbursable costs: | DKK 11.5 million |
| Equipment and operational budget: | DKK 35.0 million |
| Contingencies: | DKK 5.0 million |

Initially the EIMP budget was approved at DKK 79.6 million. A total of DKK 7.01 million will be allocated under the SPS to meet the cost of phasing out the EIMP.

**Inputs by the Government of Egypt**
The GoE's contribution will cover the full costs of all counterpart staff (including support staff), fully equipped offices (including utility costs), local telephone costs, and all costs related to contracting of monitoring institutions. The total value of the GoE's input (in cash and in kind) is estimated at LE 12 million.

### *5.10.5 Sustainability Issues*

The strategy for the use of future investment in the component has been revised after Danida carried out a Review Mission in Autumn 1997. The remainder of the component will focus more strongly on preparing the counterpart organisations for successful implementation of the component in a *Commissioning Phase*, and on training and establishment of internal procedures etc. in an additional *Consolidation Phase*. Only during a final *Phasing-Out Phase* will full management responsibilities be transferred to the counterpart organisations. This revised strategy provides a stronger guarantee for the sustainable use of funding than previously provided.

Investments in hardware and software, monitoring and sampling equipment need to be carefully targeted to build capacity within the institutions involved. This requires that ownership remains with the counterpart organisations actually using the equipment.

Future funding for operation and maintenance needs to be guaranteed, to achieve a financially sustainable and realistically achievable programme. Successful component implementation therefore requires, as a minimum, that:

- a sufficient financial basis is guaranteed for the operation of beneficiary institutions, which includes maintaining sufficient levels of staff, training and equipment;

- sufficient funds are available for the operation and maintenance of all hardware, software, monitoring and field equipment provided;

- the beneficiary institutions provide sufficient salaries and incentives for EIMP trained staff to stay in their positions.

### *5.10.6 Poverty Alleviation and Cross-Cutting Issues*

The EIMP will have little direct effect on poverty. However, improvement of environmental quality will often benefit the poorer part of the population in the first instance, particularly in densely populated areas.

### *5.10.7 Environmental Issues*

This component does not involve any engineering work or physical alterations to the environment that could cause adverse effects. There is, therefore, no requirement to perform an Environmental Assessment.

The EIMP will contribute to improved environmental quality in the medium to long term, as it will enhance the EEAAs knowledge and understanding of environmental quality and pollution sources and their interaction. This enhanced understanding is expected to support improved decision-making on environmental measures which should reduce environmental pollution (air and water) in real terms.

### *5.10.8 Risks and Assumptions*

The key assumptions for the five tasks under the EIMP are presented in detailed Logical Framework Matrices for each of the tasks.

Critical assumptions for the EIMP are that:

- there is sufficient Egyptian funding available for the continuation of the environmental monitoring after completion of the task;
- contracts between EEAA and the monitoring institutions and the Reference Laboratory are signed before the start of the consolidation phase;
- qualified staff and adequate office space are made available at EEAA;
- there is good co-operation with point source polluters, including access to sites and data; and
- an overall analytical quality objective is decided upon, including an appropriate International Quality Standard.

The main risks to successful implementation of the EIMP have been identified as follows:

- Egyptian funding of the environmental monitoring programme may not be increased during the task period, which may result in insufficient support to the programme after finalisation of the EIMP;
- the results of the monitoring programme may not be used for environmental interpretation and evaluation, or the conclusions drawn used as a basis for decision-making in relation to emission reductions;

- it may be difficult to attract or keep the best qualified environmental specialists within EEAA, the monitoring institutions and the Reference Laboratory; and

- the contracted monitoring institutions may develop a monopoly on monitoring activities.

## 5.11 Technical Assistance to the Shore Protection Authority

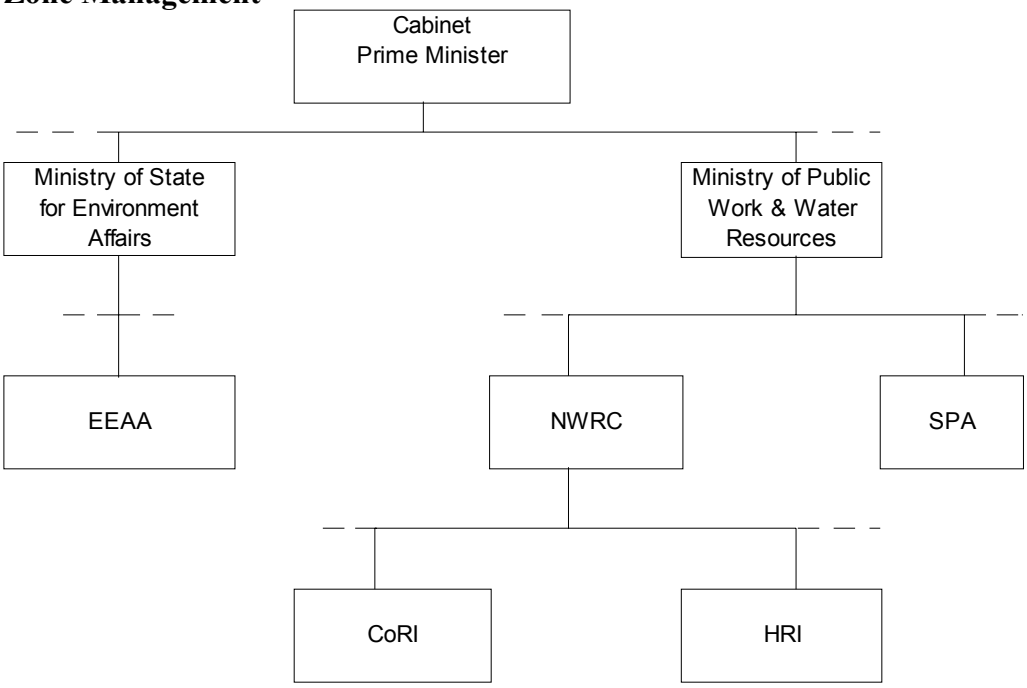
### *5.11.1 Institutional and Organisational Framework*

The EEAA is the overall co-ordinating agency for environmental protection and Integrated Coastal Zone Management (ICZM).

Shoreline Management, regarded as an element of ICZM, is the responsibility of the Shore Protection Authority (SPA) which has been established under the Ministry of Public Works and Water Resources. The SPA is supported by different research institutions, the most prominent being the Coastal Research Institute (CoRI) and Hydraulic Research Institute (HRI). Both research institutes resort under the National Water Resource Centre of the Ministry of Public Works and Water Resources.

In order to strengthen the co-operation and exchange of information and experience between SPA, CoRI and HRI, a committee with members from each organisation has been established, chaired by the SPA. *Figure 5.4* shows the institutional setting of the SPA, CoRI and HRI.

**Figure 5.4 Institutional Setting for the Shoreline Management and Coastal Zone Management**




The three elements of this component will be implemented by SPA, CoRI and HRI respectively, in close co-ordination with EEAA. A Steering Committee, chaired by SPA and including members from CoRI, HRI, EEAA and Danida, supervises implementation of the component. In addition, three Working Groups have been established, one on the Shoreline Management System and two on the Shoreline Master Plan. The full component organisation is made up of:

- a Steering Committee;
- a Team Leader;
- a Component Manager appointed by SPA;
- a Component Manager appointed by CoRI;
- a Component Manager appointed by HRI;
- Working Group Managers;
- Assistant Working Group Managers.

### *5.11.2 Problem Analysis*

The coastal areas of Egypt are under increasing environmental threat as a result of growing economic activity in the coastal zone. Shore erosion is not only connected to the building of the Aswan Dam, but also to uncontrolled construction and tourism. The coastal marine environment is threatened by oil pollution from ships and off-shore activities and municipal and industrial discharges.

The coastal zone problems are addressed in Egypt's National Environmental Action Plan, and the framework for Integrated Coastal Zone Management is being established under the overall supervision of the EEAA.

The SPA, and its supporting institutions CoRI and HRI face the task of contributing to the development of a sound ICZM Programme by developing Egypt's Shore Line Management. At the start of the component, the three institutions were perceived not to have the capacity and experience to deal with new responsibilities and tasks relating to effective Shoreline Management.

### *5.11.3 Objectives, Outputs and Implementation Strategy*

The component envisages that, by the year 2006, Coastal Zone Management will have been developed both administratively and technically so that there will be significant improvement of coastline management within 10 years of completion of the component. The components consists of three elements:

- Technical Assistance to SPA;
- Technical Assistance to CoRI;
- Technical Assistance to HRI.

The component is implemented in a two-stage milestone approach, with stage 1 lasting 15 months, and mainly focusing on supporting management and organisation of the SPA, and stage 2 lasting two and a half years, involving support to CoRI and HRI focusing more on technical capacity development. Stage 1 has been designed to prepare the SPA for implementing stage 2.

The component Description lists outputs by step and by institution. Key outputs include a Shoreline Management System, and two Shoreline Masterplans.

### *5.11.4 Inputs*

**Inputs by Danida**
Danida will provide funding for 147 months of international (expatriate) inputs and 74 months of local consultancy inputs, divided over the three institutions. Funds will also

be provided for field equipment, mathematical models and training. The Danish contribution amounts to DKK 57.6 million, the majority of which will be spent on stage 2 of the component. The project document for these inputs has been approved by Danidas Board and a Government Agreement signed in October 1998.

**Inputs by Government of Egypt**
The Government of Egypt will provide sufficient management and technical staff in all three institutions. The exact staff inputs are specified in the Component Description. In addition, laboratory facilities are provided in SPA and CoRI.

### *5.11.5 Sustainability Issues*

**The Shore Protection Agency**
SPA operations are not dependent on funding from external donors, and there have not been any significant changes in budget allocation to SPA for salaries and shore protection activities since its establishment in 1981. As shore protection has high priority for the Government of Egypt, the financial situation of SPA seems relatively stable.

**The Coastal Research Institute**
CoRI depends almost entirely on allocations from the state budget, and its financial sustainability is therefore not fully secured. The organisational sustainability is considered sufficient.

**The Hydraulic Research Institute**
The HRI is assessed as a well functioning institute, with a strong development potential. Its financial situation is regarded as sufficiently sustainable to contribute to the Danida component.

### *5.11.6 Cross-Cutting Issues*

The component envisages increased environmental awareness amongst the people in the coastal areas. In the long run, this is expected to support the ongoing democratisation and decentralisation process in Egypt.

The component also envisages recommending that more female professional staff are involved in capacity development activities and that the institutes adopts a staffing policy which will result in more balanced employment of female and male staff.

### *5.11.7 Environmental Issues*

The component does not involve engineering work or physical alterations to the environment that could have adverse effects. There is no requirement, therefore, to perform an Environmental Assessment.

The component has been designed to have a positive impact on the environment. The component's main outputs, a Shoreline Management System and Shoreline Masterplans, will be designed to achieve significant reductions in environmental pollution in and erosion of the coastal zones of Egypt.

### *5.11.8 Assumptions*

Three assumptions are of key importance to the component:

- the Ministry of Public Works and Water Resources (MPWWR) supports the strengthening of SPA;

- the EEAA and the MPWWR support development and integration of Shoreline Management into NICZM to abide by Law 4/94;

- NWRC supports the viability of CoRI.

## 5.12 KIMA Fertiliser and Ferrosilicon Plant

### *5.12.1 Institutional and Organisational Framework*

The component will be executed by KIMA through a component Steering Committee, assisted by a long term consultant.

### *5.12.2 Problem Analysis*

KIMA is the biggest industrial plant in Aswan Governorate. The residential area of KIMA consists of 1,150 apartments rented to workers of the plant at subsidised prices. The total number of people employed by KIMA is 2,400, so, including the indirect effect of KIMA on Aswan, around 10 times more people may well be dependent on the well-being of KIMA (schools, shops, services etc.). Furthermore, the fertiliser plant produces around 10% of the fertiliser in Egypt and is the only one in Upper Egypt. KIMA must, therefore, be considered a strategic industry. However, at the same time KIMA has for many years been considered a 'black spot' relating to its adverse impact on the environment. In addition, considerable problems are encountered at KIMA with regard to the working environment and occupational health hazards to workers and staff.

KIMA's financial viability is very sensitive to increases in the tariff for electrical power. KIMA was established originally to gainfully utilise surplus power from the Aswan High Dam, and is still favoured by a low power tariff in spite of the fact that the power surplus is now a thing of the past. Even a small increase in power costs would make KIMA's fertiliser plant uneconomical, whereas the ferrosilicon plant can absorb an increase to a level similar to the tariff paid by the Edfu Ferrosilicon Plant.

It is estimated that natural gas may reach Aswan in 6 to 7 years time, in which case a new 1000 tonnes/day fertiliser plant could be operational some 10 to 12 years from now, making most of the existing fertiliser plant redundant. Investments in the existing fertiliser plant are also expected to benefit the new plant.

### *5.12.3 Objectives, Outputs and Implementation Strategy*

The present component has been designed to prevent and control of pollution from the KIMA fertiliser and ferrosilicon plants. This component consist of three component phases:

- *Phase 1* focuses on detailed design and preparation of the activities at KIMA on pollution prevention and control (for which funds (DKK 15 million) have already been approved by the Danida Advisory Board, and as such not part of the SPS);

- *Phase 2* is the construction implementation, training and motivation phase, which is expected to ensure that KIMA meet the environmental standards set by the GoE on flue-gas emission from the ferrisilicon plant and wastewater discharges from the fertiliser plant;

- *Phase 3* the consolidation phase, where awareness among the workers are raised on occupational health and ensuring that they use protective cloth and other personal protective gear.

**Major outputs of the component, Phase 2 and 3**

- General environmental management.
- Significantly reduction of oil in waste water.
- Treatment of waste water with high nutrient content.
- Reduction of $NO_x$ concentration in nitric acid plant stack emission.
- Significantly reduction of mercury in air.
- Reduction of fugitive emission of ammonia gas and nitrous oxide to air.
- Reduction of dust content in ferrosilicon plant stack emission.
- Reduction of quartz and coke dust to air.
- Reduction of ferrosilicon dust in air.
- Reduction of heat exposure of workers from furnace.
- Increased use of protective clothing and equipment.
- Environmental baseline study and pollution monitoring.
- Awareness creation and motivation amongst KIMA employees.
- Improved housekeeping.
- Greening of factory area.

At the end of the component (5 years) KIMA is expected to comply with the Egyptian environmental laws concerning both the internal and the external environment. Environmental management is institutionalised in the company involving all stakeholders, management, workers and workers' association. Environmental management system is established.

When KIMA comply with Egyptian environment legislation, it is expected that KIMA have a better potential to be prepared for private investments and/or fully privatisation.

Where necessary all workers use protective clothing and gear. Awareness on the health hazards of not using this is expected to be high amongst the workers themselves, their association and the management. The association, together with the management, is prepared to take strong measures towards those employees who are not following the rules and regulations of the company in this respect.

There is the potential opportunity that KIMA will become an Environment Sector Model under the ACI component.

The component implementation will be guided by the following implementation elements:

- Focus on efforts on internal and external environmental improvements, leaving out energy saving measures and investments for higher productivity and enhanced product quality.

- Awareness creation concerning the risks from internal and external environmental pollution from KIMA production amongst employees.

- Motivation of all KIMA employees to take precautions against internal environmental pollution

- Establishment of a strong environmental department within KIMA and training of all relevant personnel in environmental management

- Implementation of the needed physical investments and activities in order for KIMA to comply with the environmental laws of Egypt

- Motivation and training of all KIMA employees in improved housekeeping and greening of the factory area

- Training of relevant KIMA personnel in operation and maintenance of pollution monitoring equipment and the investments undertaken under the component

- Assistance to the management of KIMA in preparation and possible implementation of KIMA privatisation

- A five years component period to ensure sustainability, Phase 1 lasting 1 year, Phase 2 lasting 3 years and Phase 3 lasting 1 year.

- Participatory implementation involving concerned employees in planning and implementation of individual activities

### *5.12.5 Inputs*

**Inputs by Danida**
The Advisory Board of Danida approved in June 1999 the grant of DKK 15 million for the first phase of the component. Danida will under the SPS grant the funds for the imported part of the hardware investment. Danida will also provide the needed technical assistance as well as the funds and resources for training and awareness creation within KIMA personnel.

Expert support will be sought for components involving new technologies and design, engineering, and procurement of imported equipment (predominantly from Denmark or the other Nordic countries).

**Inputs by KIMA**
KIMA will make funds available for the domestic part of the investment and other activities, and for protective clothing and equipment (both domestic and foreign) estimated at LE 20.9 million (approximately DKK 42 million). It will also provide the local workforce for implementation, wherever possible using its own personnel.

### *5.12.6 Sustainability Issues*

The Government of Egypt, through the Holding Company, will benefit from the component improvements within the plant. This in turn will assist in making KIMA into a viable industry, which is of importance for the whole of Aswan.

Analyses carried out (during appraisal of the component in 1998) conclude that KIMA, with its present technology, will be a viable operation for the next 10 years. It is estimated that in about 6 to 7 years, natural gas will reach Upper Egypt, and that it will take about 3 to 4 years to build a new natural gas based fertiliser plant. It is, therefore, considers unlikely that the GoE will close down the KIMA fertiliser production (through increasing electricity prices) before a new plant is ready for production. A major part of the component investments in the fertiliser plant will be useful in a new plant based on natural gas as raw material.

The ferrosilicon plant, including the environmental investments implemented under the component, will probably have a considerably longer lifetime than the present fertiliser plant; at least 20 years.

The fertiliser plant with its present technology will become unviable the moment electricity prices are (even marginally) increased. However, it is believed by KIMA that the plant is attractive for an anchor investor within the domestic fertiliser industry, and that the GoE will do its utmost to ensure the future of KIMA for social reasons alone (KIMA is the largest industry in Aswan).

### *5.12.7 Poverty Alleviation and Cross-Cutting Issues*

A large part of the workers at the KIMA factory and their families are among the less prosperous. However, not considered among the poorest people of Aswan. Some of the neighbourhoods surrounding the factory include housing.

The component will benefit the employees of KIMA and their families living in the neighbouring residential area. The employees will have a significant improvement in their working condition concerning occupational health, which will eventually lead to improvement of their physical health. The neighbouring area counting about 10-15,000 people will have significantly less air and water pollution from the plant.

Residents in other areas of Aswan exposed to KIMA pollution will as well benefit from the reduced pollution of the Nile and the air from the plant.

The availability of cheap fertiliser is a prerequisite for farmers to make a living, and therefore KIMA is considered one of the most important industries in Aswan.

The component does not focus specifically on gender issues.

### *5.12.8 Environmental Issues*

The component has been designed primarily to prevent pollution, improve environmental performance and improve occupational health conditions at the KIMA complex. An Environmental Management Plan (see Annex A) will be developed according to Danidas publication: "Environmental Assessment for Sustainable Development, December 1999".

The actual environmental and health improvements are expected to take place mainly in phase 2 and 3 of the component, and compliance with Egyptian environmental standards is expected achieved by the year 2002.

### *5.12.9 Risks and Assumptions*

The main assumptions for successful component implementation are as follows:

- the Egyptian government accepts a low (feasible) electricity price for KIMA, until natural gas is available in Upper Egypt;
- the Holding Company will not interfere in the use of KIMA funds for component purposes;
- the Holding Company supports the move towards more investment autonomy for KIMA;
- taxes and duties on imported items under the component will be paid for by KIMA, who will in turn apply to the government for exemption of payment of these amounts;
- KIMA will, upon request, release employees from their daily duties for them to take part in component activities;
- KIMA will build up a strong environmental department in accordance with advice given through the Component.

# 6 Budget

## 6.1 Overview of Programme

The following table shows the overall budget for the proposed SPS.

**Table 6.1 Overall Budget for SPS (DKK million)**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|
| DEM-component | 2,02 | 4,19 | 5,09 | 3,69 | 3,47 | 2,28 | 20,74 |
| CEM-component | 3,08 | 3,79 | 3,19 | 3,19 | 3,19 | 3,19 | 19,64 |
| EMG-component | 10,34 | 13,67 | 15,15 | 19,15 | 21,52 | 21,52 | 101,36 |
| ACI-component | 6,63 | 7,51 | 7,37 | 23,55 | 25,14 | 30,41 | 100,61 |
| KIMA | 15,00 | 22,00 | 20,00 | 4,06 | | | 61,06 |
| EIMP | 2,31 | 2,70 | 0,80 | 0,80 | 0,40 | | 7,01 |
| PSU | 3,97 | 3,99 | 3,99 | 3,99 | 3,99 | 3,99 | 23,90 |
| Unallocated (approx. 10%) | | | | | | | 32,68 |
| ***Total new*** | ***43,36*** | ***57,85*** | ***55,59*** | ***58,42*** | ***57,71*** | ***61,39*** | ***367,00*** |
| Ongoing activities (Approved) | | | | | | | |
| KIMA | 8,00 | | | | | | 8,00 |
| EIMP | 3,79 | | | | | | 3,79 |
| SPAII | 14,60 | 16,00 | 15,40 | 6,00 | | | 52,00 |
| CUH | 1,30 | | | | | | 1,30 |
| *Total ongoing1)* | *27,69* | *16,00* | *15,40* | *6,00* | *0,00* | *0,00* | *65,09* |
| ***Total new + ongoing*** | ***71,05*** | ***73,85*** | ***70,99*** | ***64,42*** | ***57,71*** | ***61,39*** | ***432,09*** |

*1)Total ongoing is excluding funds to be spent in year 2000.*

The total value of the SPS programme, is DKK 432,09 million spread over the period 2001 to 2006. The programme is expected to begin in 2001.

The total disbursement for the new SPS components is budgeted at DKK 367,00 million. This value includes a contingency allowance on non TA, across the board for all the components including the PSU, of 8%. The already committed projects are budgeted at a total of DKK 65 million. Overall, there is some DKK 32 million of unallocated funds for use during the sector programme. It should be noted that the budget shown in *Table 6.1* above excludes the cost of directly funded Danida advisors. It should also be noted that the budget estimates use a consistent set of unit costs, which reflect the current costs in Egypt. It should finally be noted that the budget is expressed in terms of January 2000 prices; no allowance is made for inflation over the programme period.

The Egyptian contribution to the programme is specified in each of the components and in the project documents for the on-going projects. A major element is provision of adequate staff and office facilities within the Central Department of Branches Affairs, the Regional Branch Offices, the Central Department for Education, Communication and Awareness and the Central Department for Planning and Technical Co-

operation, all in EEAA, as well as staff in the governorate EMUs and the Federation of Egyptian Industries.

The GoE contribution to the EIMP will in addition to staff and office facilities also cover all costs related to contracting of monitoring institutions. The total value of the GoE's input (in cash and in kind) is estimated at 12 million LE.

In addition the Egyptian Government will provide the equivalent of approximately 40 million DKK (20.9 million L.E.) to upgrade the KIMA factory. It is also anticipated that a financing facility for future environmental management implementation will be established within the FEI utilizing funds generated from the members of the FEI.

Finally, the EMG component will aim at initiating cost recovery mechanisms at governorate level as well as securing allocation of adequate Government budget lines for the governorate's environmental management efforts.

The next section shows the budgeted expenditure by individual component, showing the modality and phasing of expenditure.

## 6.2 Budget for individual SPS components

### *6.2.1 Programme Support Unit (PSU)*

The programme support unit will provide overall accountancy and financial management support, working with the Environmental Protection Fund, and providing technical support as well as overall programme management. The budget for this unit, including costs of additional local staff at the RDE, but excluding Danish Chief Technical Advisor (CTA) and the RDE co-ordinator, totals DKK 23,9 million over the programme period. The breakdown of the costs of this element is shown in the following table.

**Table 6.2 Budget for Programme Support Unit (DKK millions)**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|
| *International* | | | | | | | |
| Danida Advisor | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| RDE coordinator | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Accountant | 0,48 | 0,48 | 0,48 | 0,48 | 0,48 | 0,48 | 2,88 |
| Dev. Banker 1) | 0,00 | 0,72 | 0,72 | 0,72 | 0,72 | 0,72 | 3,60 |
| *Total* | *0,48* | *1,20* | *1,20* | *1,20* | *1,20* | *1,20* | ***6,48*** |
| | | | | | | | |
| *Local* | | | | | | | |
| Book keeper | 0,18 | 0,18 | 0,18 | 0,18 | 0,18 | 0,18 | 1,08 |
| Support staff | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,54 |
| Assistance | 0,12 | 0,12 | 0,12 | 0,12 | 0,12 | 0,12 | 0,72 |
| *Total* | *0,39* | *0,39* | *0,39* | *0,39* | *0,39* | *0,39* | ***2,34*** |
| | | | | | | | |
| Annual Sector Review and Special Studies | 1,50 | 1,50 | 1,50 | 1,50 | 1,50 | 1,50 | **9,00** |
| Office Equip | 0,40 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,40 |
| Vehicles | 0,25 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,25 |
| Operat. Costs | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 1,20 |
| Travel | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 1,20 |
| External training | 0,30 | 0,30 | 0,30 | 0,30 | 0,30 | 0,30 | 1,80 |
| Dissem. | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,60 |
| Communic. | 0,03 | 0,03 | 0,03 | 0,03 | 0,03 | 0,03 | 0,18 |
| *Total* | *1,46* | *0,81* | *0,81* | *0,81* | *0,81* | *0,81* | **5,63** |
| Contingency 8% | 0,12 | 0,07 | 0,07 | 0,07 | 0,07 | 0,07 | 0,45 |
| **GRAND TOTAL** | **3,97** | **3,99** | **3,99** | **3,99** | **3,99** | **3,99** | **23,90** |

1) Development Banker or other relevant technical assistance

### *6.2.2 Decentralised Environmental Management (DEM)*

The DEM component contains two distinct (but complementary) elements - the support to the central Branches Affairs department at EEAA, and direct support to two RBOs. The overall budget is just over DKK 20,7 million. Most of the cost is in technical assistance and consultancy support (laboratory equipment for the RBOs has already been financed by JICA).

**Table 6.3 Budget for DEM Component (DKK million)**

| Item | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| *International* | | | | | | | | |
| Danida Advisor | | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| TA Short Term | | 0,72 | 1,44 | 1,44 | 1,44 | 1,44 | 0,72 | 7,20 |
| *Total* | | *0,72* | *1,44* | *1,44* | *1,44* | *1,44* | *0,72* | ***7,20*** |
| | | | | | | | | |
| *Local* | | | | | | | | |
| TA Long Term | | 0,18 | 0,36 | 0,72 | 0,72 | 0,72 | 0,36 | 3,06 |
| TA Short Term | | 0,18 | 0,36 | 0,36 | 0,36 | 0,36 | 0,36 | 1,98 |
| *Total* | | *0,36* | *0,72* | *1,08* | *1,08* | *1,08* | *0,72* | ***5,04*** |
| | | | | | | | | |
| Field Equip. | | 0,10 | 0,30 | 0,30 | 0,10 | 0,10 | 0,00 | 0,90 |
| Office Equip | | 0,20 | 0,40 | 0,40 | 0,20 | 0,00 | 0,00 | 1,20 |
| Vehicles | | 0,25 | 0,25 | 0,75 | 0,00 | 0,00 | 0,00 | 1,25 |
| Other Equip. | | 0,10 | 0,20 | 0,20 | 0,05 | 0,05 | 0,05 | 0,65 |
| Operat Costs | | 0,10 | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 2,10 |
| Communic. | | 0,02 | 0,03 | 0,03 | 0,03 | 0,03 | 0,03 | 0,17 |
| Training | | 0,10 | 0,30 | 0,30 | 0,30 | 0,30 | 0,30 | 1,60 |
| *Total* | | *0,87* | *1,88* | *2,38* | *1,08* | *0,88* | *0,78* | ***7,87*** |
| Contingency 8% | | 0,07 | 0,15 | 0,19 | 0,09 | 0,07 | 0,06 | 0,63 |
| **GRAND TOTAL** | | **2,02** | **4,19** | **5,09** | **3,69** | **3,47** | **2,28** | **20,74** |

### *6.2.3 Communication in Environmental Management (CEM)*

This component provides support and services to the programme as a whole, as well as developing capability in education and awareness raising within EEAA. The budgeted cost of this component is just over DKK 19,6 million and over half of this is allocated to training, development of dissemination materials etc.

**Table 6.4 Budget for CEM Component (DKK million)**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|
| *International* | | | | | | | |
| Danida Advisor | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| TA Short Term | 0,60 | 0,60 | 0,60 | 0,60 | 0,60 | 0,60 | 3,60 |
| *Total* | *0,60* | *0,60* | *0,60* | *0,60* | *0,60* | *0,60* | ***3,60*** |
| | | | | | | | |
| *Local* | | | | | | | |
| TA Long Term | 0,36 | 0,36 | 0,36 | 0,36 | 0,36 | 0,36 | 2,16 |
| TA short Term | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,54 |
| Support Staff | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,09 | 0,54 |
| *Total* | *0,54* | *0,54* | *0,54* | *0,54* | *0,54* | *0,54* | ***3,24*** |
| | | | | | | | |
| Office Equipment | 0,20 | 0,20 | 0,15 | 0,15 | 0,15 | 0,15 | 1,00 |
| Vehicles | 0,25 | 0,50 | 0,00 | 0,00 | 0,00 | 0,00 | 0,75 |
| Other Equip. | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 0,20 | 1,20 |
| Operat Costs | 0,15 | 0,15 | 0,15 | 0,15 | 0,15 | 0,15 | 0,90 |
| Material Develop | 0,60 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 5,60 |
| Training | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 2,40 |
| *Total* | *1,80* | *2,45* | *1,90* | *1,90* | *1,90* | *1,90* | ***11,85*** |
| Contingency 8% | 0,14 | 0,20 | 0,15 | 0,15 | 0,15 | 0,15 | **0,95** |
| **GRAND TOTAL** | **3,08** | **3,79** | **3,19** | **3,19** | **3,19** | **3,19** | **19,64** |

### *6.2.4 Environmental Management in the Governorates (EMG)*

The EMG programme supports capacity development in two governorates. Demonstration projects and community projects form an important element of the component. Thus, the overall budget for this component is estimated at DKK 101,36 million and of this, nearly half is allocated to equipment through the demonstration and pilot projects. The component will use a substantial number of international short-term specialist inputs, totalling some 192 months over 6 years. Further, there is a substantial input of local consultants and specialists, as well as office and support staff to the component.

**Table 6.5 Budget for EMG Component (DKK million)**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|
| International | | | | | | | |
| TA Long Term | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | 7,20 |
| TA Short Term | 2,16 | 3,60 | 4,32 | 4,32 | 4,32 | 4,32 | 23,04 |
| *Total* | *3,36* | *4,80* | *5,52* | *5,52* | *5,52* | *5,52* | *30,24* |
| | | | | | | | |
| Local | | | | | | | |
| TA Long Term | 0,72 | 0,72 | 0,72 | 0,72 | 0,72 | 0,72 | 4,32 |
| TA Short Term | 0,63 | 0,63 | 0,63 | 0,63 | 0,63 | 0,63 | 3,78 |
| Support Staff | 0,18 | 0,18 | 0,18 | 0,18 | 0,18 | 0,18 | 1,08 |
| *Total* | *1,53* | *1,53* | *1,53* | *1,53* | *1,53* | *1,53* | *9,18* |
| | | | | | | | |
| Field Equip. | 0,80 | 0,80 | 0,80 | 0,80 | 0,80 | 0,80 | 4,80 |
| Office Equip | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 2,40 |
| Vehicles | 0,50 | 0,50 | 0,00 | 0,00 | 0,00 | 0,00 | 1,00 |
| Other Equip. | 0,00 | 0,00 | 0,00 | 0,30 | 0,50 | 0,50 | 1,30 |
| Operat Costs | 0,15 | 0,30 | 0,30 | 0,30 | 0,30 | 0,30 | 1,65 |
| Dissem. | 0,20 | 0,40 | 0,40 | 0,40 | 0,40 | 0,40 | 2,20 |
| Communic./workshops | 0,40 | 0,40 | 0,60 | 1,00 | 1,00 | 1,00 | 4,40 |
| Dem.projects | 2,00 | 3,00 | 4,00 | 6,00 | 8,00 | 8,00 | 31,00 |
| Community based projects | 0,60 | 1,00 | 1,00 | 2,00 | 2,00 | 2,00 | 8,60 |
| *Total* | *5,05* | *6,80* | *7,50* | *11,20* | *13,40* | *13,40* | *57,35* |
| | | | | | | | |
| Contingency 8% | 0,40 | 0,54 | 0,60 | 0,90 | 1,07 | 1,07 | 4,59 |
| **GRAND TOTAL** | **10,34** | **13,67** | **15,15** | **19,15** | **21,52** | **21,52** | **101,36** |

### *6.2.5 Achieving Cost Effective Compliance with Environment Legislation within Industry (ACI)*

This component involves technical assistance and consultancy support to the industrial sector, supported by substantial investment funds for Model projects and other investments stimulated as a result of the programme. This is the largest component of the programme, at DKK 100,6 million. Expenditure begins in 2001, and builds up over the programme. In the first year DKK 1 million is budgeted for pilot model projects. This figure increases to DKK 3 million in year 2004, where model investments are envisaged to begin. The total funds allocated for investment in Sector Model projects for achieving cost effective compliance, is DKK 60 million.

**Table 6.6 Budget for ACI Component (DKK thousand)**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | TOTAL |
|---|---|---|---|---|---|---|---|
| *International* | | | | | | | |
| TA Long Term | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | 7,20 |
| TA Short Term | 1,20 | 1,56 | 1,20 | 0,96 | 0,96 | 0,96 | 6,84 |
| *Total* | *2,40* | *2,76* | *2,40* | *2,16* | *2,16* | *2,16* | ***14,04*** |
| | | | | | | | |
| *Local* | | | | | | | |
| TA Long Term | 0,54 | 0,54 | 0,54 | 0,41 | 0,27 | 0,14 | 2,43 |
| TA Short Term | 0,68 | 0,60 | 0,45 | 0,38 | 0,38 | 0,38 | 2,85 |
| Support Staff | 0,05 | 0,05 | 0,09 | 0,09 | 0,09 | 0,09 | 0,45 |
| *Total* | *1,26* | *1,19* | *1,08* | *0,87* | *0,74* | *0,60* | ***5,73*** |
| | | | | | | | |
| Office Equip | 0,50 | 0,00 | 0,00 | 0,40 | 0,00 | 0,00 | 0,90 |
| Vehicles | 0,25 | 0,50 | 0,00 | 0,00 | 0,00 | 0,00 | 0,75 |
| Operat. Costs | 0,05 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,55 |
| Communic. | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,10 | 0,60 |
| Pilot sector model projects | 1,00 | 2,00 | 3,00 | 3,00 | 0,00 | 0,00 | 9,00 |
| Sector model projects | 0,00 | 0,00 | 0,00 | 15,00 | 20,00 | 25,00 | 60,00 |
| Training | 0,50 | 0,25 | 0,05 | 0,05 | 0,05 | 0,05 | 0,95 |
| Visits to industries | 0,35 | 0,35 | 0,35 | 0,35 | 0,35 | 0,35 | 2,10 |
| *Total* | *2,75* | *3,30* | *3,60* | *19,00* | *20,60* | *25,60* | ***74,85*** |
| Contingency 8% | 0,22 | 0,26 | 0,29 | 1,52 | 1,65 | 2,05 | 5,99 |
| **GRAND TOTAL** | **6,63** | **7,51** | **7,37** | **23,55** | **25,14** | **30,41** | **100,61** |

For the KIMA and EIMP appraised projects/components a detailed budget can be found in the original Projects Documents

# 7 Assumptions and Preconditions

## 7.1 Assumptions

The SPS is based on a detailed analysis of the policy, institutional, social and economic context of Egypt as a whole, the target governorates and, in particular, the environment sector. From this, reasonable assumptions have been made that economic development will continue, and with it, the process of social development, including transformation of institutions and the broadening and deepening of democracy. It is in this context that the SPS will support decentralisation of, and greater public participation in environmental decision making.

The overall assumptions that concern the entire environment sector programme support are that GoE continues these policies, in particular:

- continued efforts to implement the policy directives and priorities;
- adherence to the policy directives and priorities by all ministries;
- continued support to decentralisation efforts;
- continued participation of civil society in environmental decision making.

In general, the SPS supports complete elements of Egypt's national policy and does not rely on ongoing initiatives outside the immediate control of Danida.

## 7.2 Preconditions

Prior to the implementation of the SPS, legal requirements must be met including the following:

- Danida and the Egyptian government partner, EEAA, must sign the SPSD;
- memoranda of understanding must be signed between the EEAA, Danida and the implementing agency (except where this is the EEAA);
- the SPSD must be approved by the Danida Board and the Finance Committee of the Danish Parliament;
- the Government Agreement for the SPSD must be signed (by MoIC for Egypt and MFA for Denmark);
- the Government Agreement must be ratified by the Egyptian Parliament.

The GoE procedures for signing and ratifying intergovernmental cooperation agreements have recently been revised to ensure that all such assistance is well targeted and consistent with government priorities. The new procedures are however very complex, and have so far proved to be very time-consuming (11 months plus). It is necessary that the handling of this process become timely and expeditious, so that the momentum built up with partners in designing components will not be dissipated.

For implementation of the individual components institutions must be prepared to receive the assistance and make their contributions, as detailed in the Component Descriptions. It is a precondition for the implementation of any component that the partner organisation demonstrates that counterpart staff and funds are available before Danida commences disbursement of funds.

# 8 Indicators

## 8.1 Use of Indicators

Implementation of the SPS will be monitored and regulated by the use of verifiable indicators at the programme (sector) level, and at the individual component level. These will be a key management tool, allowing periodic adjustments of the strategy and inputs in order to maximise the predicted benefits.

At the sector level indicators are needed to monitor:

- development of the sector framework (national and environment sector policy, economic and strategic situation) particularly where this might affect the assumptions on which the SPS strategy is based;
- the overall rate and completeness of supply of both Danida and partner inputs;
- the overall impact of the SPS on the development objective, including decentralisation of environmental decision-making and specific impacts on poverty and cross-cutting issues.

At component level, indicators to monitor inputs and outputs have been incorporated into the logical frameworks. These are fully elaborated in each of the component descriptions.

## 8.2 Development of Sector Level Indicators

Suitable indicators for tracking issues such as poverty alleviation and the impact on cross-cutting issues, including gender and good governance, will eventually be developed for the three sectors that Danida supports in Egypt. The Environment SPS will, however, precede the programmes in the other Danida-supported sectors, so indicators have been developed to monitor against the immediate objectives and the outputs.

The design of indicators and verification processes must take the following into account:

- Use of already existing information or information produced by national institutions, such as the use of the Environment Information and Monitoring Programme (EIMP), the Egyptian Environmental Information System (EEIS) and the State of the Environment report currently under preparation.
- The linkage of the programme support indicators to national and governorate level indicators.
- Use of participatory methods to increase the engagement and relevance/accuracy of the verification process.
- Use of independent agents to increase transparency and gain external insight.
- The need to be able to measure or derive conclusions about the unique contribution arising from Danidas support.

Initial indicators for the programme as a whole, and their means of verification, are listed in *Table 8.1*.

**Table 8.1 SPS Level Indicators and Verification**

| Type | Indicator | Means of verification |
|---|---|---|
| Input | Identified component and SPS management inputs from Egypt and Denmark provided | Progress reports by the PSU<br>Verification by Annual reviews |
| | Staff appointed on merit and qualifications | Personnel performance assessment by PSU |
| | Timely disbursement and expenditures | Financial reports by the EPF management |
| Process | Timely transfers of funds to the components` implementing agencies | Financial reports by the EPF management |
| | | Financial reports by the component management |
| | Timely and adequate inception and progress reports | Component steering committee<br>PSU Quarterly Reports, Inception review and Annual reviews |
| Impact on Development Objective | Increased efficiency of enforcement of Law 4/94 | Analysis of EEAA Annual Reports |
| | Increased access of the poor to environmental services | Special study to be commissioned by RDE/PSU |
| | Environmental improvement achieved in target areas | Special study to be commissioned by RDE/PSU |
| Impact on Cross-Cutting issues | Increased participation of women in environmental decision making | Analysis of EEAA Annual Reports and Component Reports |
| | Explicit attention to gender issues in policy formulation | Analysis of EEAA Annual Reports and MSEA |
| | Environmental Quality improved | State of the Environment report |

Indicators should when relevant comply with requirements of the Output Indicator System currently under development by Danida, and may draw upon the set of indicators in UNDP's Human Development Report for Egypt, which is updated every 3-4

years. Danida will be represented by the Embassy Co-ordinator during the development process and in the final determination of indicators.

## 8.3 Verification

The programme management and the executing agencies will use the period up to the first annual review to establish the indicators and the system for verification and feedback. Tracking and verification of indicators must be a joint activity between partners. The CTA and Embassy Coordinator should determine whether field studies, specially commissioned through PSU resources, would be a cost-effective enhancement of the verification effort.

Verification may also involve other donors through the donor coordination meetings and UNDP, utilising their Human Development Report for Egypt.

# 9 SPS Management

## 9.1 Programme Support Unit

The SPS Director will be a senior staff member of EEAA, to be nominated by the CEO. He or she will be supported by an Danida recruited Chief Technical Advisor (CTA) who will be situated in an office within EEAA.

The SPS will be coordinated and administered by a Programme Support Unit (PSU) that will be situated in EEAA. The CTA will be responsible for the day-to-day management of the PSU, assisted by four man-months per year of accountant's time (international) and a full time book keeper. A moderate budget has been allocated for the CTA to undertake awareness raising activities whenever a good opportunity arises. These may include workshops or other mechanisms that he/she may wish to use to disseminate information about the SPS. The PSU will also manage the training budget for training courses, which will be allocated according to criteria developed by the PSU.

## 9.2 Embassy Coordinator

The SPS management will be supplemented and supported by a Sector Coordinator located in the Danish Embassy in Cairo. This role will involve coordination with other Danida sectoral activities and with other donors, as well as taking the lead in discussions relating to overall policy and inter-governmental relations. For the implementation of the SPS, the Embassy will have the following tasks:

- review on behalf of Danida the quarterly progress reports;
- review the annual workplan;
- respond to ad hoc issues of principle or policy matters from the CTA;
- plan, prepare (jointly with MOIC and EEAA) and participate in Annual Sector Reviews;
- undertake the necessary policy dialogue with the GoE representatives; and
- participate in donor co-ordination.
- Liaison and co-ordination with MFA headquarters in Copenhagen

## 9.3 Overall Management and Organisation

The programme will begin as soon as possible after final ratification by the parliament of Egypt. The management and organisation at programme level will be structured around:

- the SPS Coordination Committee;

- Component Steering Committees composed of the institutions and organisations receiving support, and other stakeholders where appropriate.

The management and organisation follows Egyptian systems and conventions to the maximum extent possible. Therefore, the Coordination Committee should mirror the composition of the Board of Directors of EEAA, where other stakeholders, line ministries and NGOs are represented.

As to the EMG component a joint steering committee is proposed with representatives of both Aswan and Beni Suef Governorates (Governor or his representatives) GAO and other stakeholders as appropriate.

The SPS management and organisation structure is presented in *Figure 9.1*.

## 9.4 SPS Coordination Committee

The implementation of the programme shall be guided by the SPS Coordination Committee, comprising members of EEAA Board of Directors, and a representative from each partner organisation, including RDE.

The Committee will have the following functions.

- To supervise the overall development of the programme in accordance with the strategic considerations defined by the SPSD. The supervision will be based on progress reports from the components and the findings and recommendations of the Annual Sector Reviews.

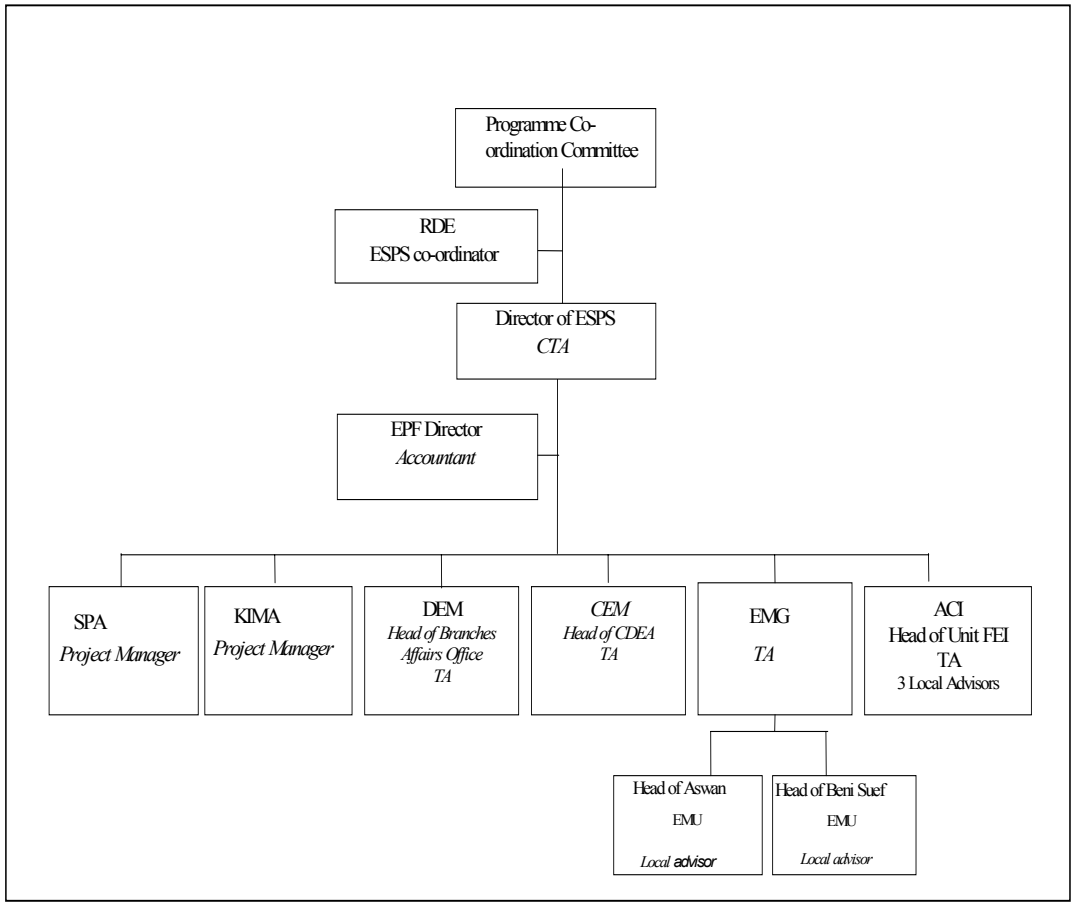
- To prepare the Annual Sector Reviews, including approval of the terms of reference, selection of Egyptian participants in the ASR and comment on the final draft reports.

The first meeting of the Coordination Committee should take place 1-2 months prior to the inception review. Meetings should thereafter take place at least twice a year, where one meeting should be no less than 3 months prior to the ASR (which is expected to take place every June), and another meeting between the completion of the ASR and the Annual Consultations between the Government of Egypt and Danida. A third meeting may be necessary following the Annual Consultations, to supervise the implementation of any major amendments to the programme that may have been agreed.

Extraordinary meetings may be called at the initiative of the Programme Director or the Royal Danish Embassy, if particular difficulties arise that may require urgent action involving significant changes to the yearly work plan.

## Figure 9.1 SPS Organisation and Management Structure

The upper positions in the boxes are Egyptian counterparts in the respective institutions. Positions written in Italic are financed by the SPS.




CTA: Chief Technical Advisor
TA: Technical Assistance

## 9.5 Administrative Procedures

A Chief Technical Advisor (CTA), will liaise with the relevant Egyptian authorities and organisations and assist in assuring a coherent implementation of the component activities.

The CTA will be placed in EEAA. The CTA will act as secretary to the Coordination Committee and, together with the Programme Director, will be responsible for convening meetings of the Steering Committees.

The CTA will have a special responsibility for overseeing the implementation of the components. The CTA will, together with the Programme Director, prepare a draft manual of procedures within the first three months of the establishment of the PSU. This draft will be presented for approval by the SPS Co-ordination Committee. The manual should include the following aspects:

- decision and approval procedures;
- division of responsibility between the SPS and the component management;
- SPS filing system;
- channels of communication;
- reporting and monitoring systems;
- financial control, flow of funds and auditing procedures.

The PSU will be supported by a part-time international accountant and a full-time book-keeper, both placed within the office of the Director of the Environmental Protection Fund in EEAA.

In addition to the CTA, short term international advisors and consultants will be placed in the EEAA. One long-term advisor, who is already in place, will assist the EIMP; others will assist the Department for Environmental Communication and Awareness and the Department for Branches Affairs.

Additionally, an International Consultant will be located with the EEAA, to support the Environmental Management in Governorates. This will require extensive travel to Aswan and Beni Suef. A Danida recruited consultant will support the implementation of the component with the FEI.

# 10 Monitoring

## 10.1 Reporting Requirements

The overall tool for monitoring SPS progress is the Annual Sector Review (ASR), a once-yearly complete review of progress against indicators, carried out jointly by Danida management and the partner organisation. In addition, regular reports will be produced throughout the period of SPS implementation for each component, and for the programme as a whole. They will include the following.

**By the Implementing Agency for Each Component:**

- an inception report, ready 6 months after commencement of the SPS;
- quarterly progress reports for the component;
- annual work plans for the component.
- Update of the EMP (EMG, ACI and KIMA)

**By the Programme Director (with the Chief Technical Advisor):**

- an inception report, ready 6 months after commencement of the SPS;
- quarterly progress reports for the SPS;
- annual work plans for the SPS.

**By the Embassy Coordinator at RDE:**

- yearly focus issues paper for the ASR.

**By the ASR Team (Danida, RDE and EEAA):**

- Terms of Reference for the ASR;
- Technical Review Working Papers;
- Annual Sector Review Agreement (signed by the Ambassador of Denmark).

Progress reporting should be succinct and should emphasise achievements measured in relation to defined indicators for the individual components and include a summary of financial status. The layout and content of each report should conform to the recommendations in Danidas *Guidelines for Sector Programme Support* (1998).

## 10.2 Timing of Key Events

The timing of report production must take into account the fiscal years of both Denmark and Egypt, the timing of the Annual Consultations between the governments, and the consequent timing of the ASR. Ideally, the ASR should take place a few months prior to the Annual Consultations and in good time to influence the national budget preparation. It should also avoid major holidays as far as possible. These considerations suggest that the ASR would be best held in June. The key dates are then as follows:

**Table 10.1 Dates of Key Annual Events**

| Event | Date |
|---|---|
| Egypt Fiscal Year: | July 1 to June 30 |
| Denmark Fiscal Year: | January 1 to December 31 |
| Annual Consultations: | October (tentative) |
| Coordination Committee Meetings | March and September (at a minimum) |
| Annual Sector Review | June |

## 10.3 Review and Evaluation

A joint inception review will be carried out approximately 6 months after programme start.

Joint annual sector reviews will assess the work plans and budgets for the following 18 months. The ASR will make recommendations to the SPS Co-ordination Committee regarding the implementation of the SPS.

An joint evaluation of the SPS will be carried out by Danida after 4 years of implementation of the SPS to provide a basis for a possible continuation.

A joint evaluation shall be carried out for each component upon its completion.

## 10.4 Revision of Components

In addition to an overall review of the effectiveness of the SPS at a programme level, the ASR will provide an opportunity to consider radical revision to components, where this is warranted based on their performance against indicators and taking into account the evaluations of stakeholders.

In exceptional circumstances the ASR may also decide, with the approval of the Co-ordination Committee, to create a new component or terminate an existing one. A new component will require a Component Description to be prepared, in consultation with stakeholders and in accordance with Danida Guidelines.

# 11 Flow of Funds, Accounting and Auditing

## 11.1 Introduction

This section describes the proposed flow of funds for the SPS programme. Under the procedures for programmes support it is desirable to disburse funds directly to the implementing agency, to support all activities of the programme, rather than to disburse on a project by project basis from Danida offices.

In practice, there is little experience of direct disbursement of funds through local institutions in Egypt, which is not surprising considering the cumbersome procedures characteristic of public finances in Egypt and the lack of transparency of financial flows.

Nevertheless, Danida recognises the potential importance of the Environment Protection Fund as a vehicle for supporting environmental investments. The EPF was established under Law 4/94 and is seen as a vehicle for "contributions and donations presented by national and foreign bodies for the purposes of environmental protection and development and which are accepted by EEAAs Board of Directors". Use of the fund as a disbursement mechanism is consistent with Danidas philosophy of empowering partner agencies.

However, as discussed more fully elsewhere, the Fund is not yet operational and there are two main processes which must be completed; firstly, the regulations for the Fund must be agreed between MSEA and the Ministry of Finance (MoF). Once this has been done, detailed procedures and regulations can be prepared. This remains the principal hurdle, but future plans for the operation of the fund and resource enhancement are still being developed. The full picture of future operations and prospects is thus not yet in place, although it is reasonable to assume that it will become fully operational. It is also important to recognise that the application of funds in the EPF needs to be reformed, as is planned. At present funds in the EPF are virtually indistinguishable from its own resources, and are used to support salaries and programmes from the Agency. It is planned that no more than 25% of the fund should be used in this way.

Danida respects the spirit of Law 4/94 in the Sector Programme Support and use the Environmental Protection Fund as a vehicle for disbursement of financial support. The understanding is that the fund provisions will permit donors to set criteria and constraints on the application of their funds, in due course. However, since the Fund is not yet ready to accept donor funds, a transitional mode of operation will be necessary. It is also the case that only part of the SPS funds should be disbursed through the EPF, at least in the short term. It must be remembered that in setting up the SPS, the programme may continue for 15-20 years; there is ample scope for changing the financing flows so that funds for all expenditure heads are disbursed directly through the EPF, as the Fund matures and its operating procedures are seen to have the levels of transparency and accountability which Danida requires.

The next section proposes a financing structure taking into account the limitations - and potential - associated with the current situation.

## 11.2 Overview of Proposed Financial Flow

*Consultancy services and equipment.* Funds to cover international consultancy services and equipment, will in the case of all components, be disbursed directly by Danida.

*Projects.* Funds for locally generated projects (relevant to the DEM, EMG and ACI components, following revisions to the components by the appraisal mission) will be disbursed through the EPF once certain criteria regarding its functioning are met. The appraisal team emphasises that the criteria should relate to accountability as well as to the effectiveness and efficiency with which project objectives are achieved. The appraisal mission also recommends that EPF operations should be subject to auditing by international auditors on a semi-annual basis.

In the period between implementation of the SPS and fulfilment of the criteria related to EPF's functioning, a Danida-EPF Special Fund (DESF) will manage and authorise disbursements. DESF will operate under the authority of Danida but with participation of EPF in co-signing of cheques and financial appraisals.

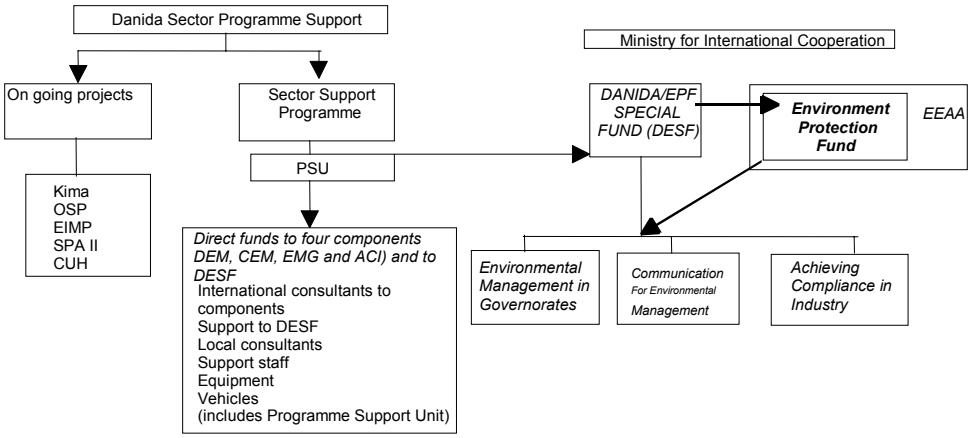
Full implementation of EPF is expected at the start of the new fiscal year, June 2001. In the meantime, regulations to govern the functioning of EPF remain to be approved by the Ministry of Finance and a 15 months pilot phase is expected to be completed. The pilot phase, expected to be initiated in April 2000, will test operations based on 4-6 projects selected on the basis of criteria laid out in an operating manual presently under preparation.

The decision to provide assistance in development banking, financial controlling or other relevant technical assistance to the EPF will be taken by the EEAA/CTA during the inception of the SPS taking into consideration the EPF's progress in meeting the above-mentioned performance criteria.

Disbursements for projects under the relevant components will be released subject to applications, which will be reviewed technically by Component Steering Committees to be set up for each component, and financially by EPF (DESF in the interim period). In the case of ACI, details regarding the principles for the disbursement mechanism for sector models will follow the agreement on the exact form, which these models will take.

The overall flow of funds for the Danida sector programme is illustrated in *Figure 11.1* below.

**Figure 11.1 Danida Sector Programme Support - Flow of Funds**




The ongoing projects are funded directly through Danida, as shown in the left side of the figure. The funds for consultancy and local operation costs (minor office expenses, etc.), equipment and vehicles are disbursed directly through the management of the PSU. The funds for programmes and projects under components CEM, EMG and ACI are disbursed initially through the jointly managed DESF. Over time, as the arrows indicate, it is planned that the DESF would move to within the EPF. As noted, the circumstances under which this could happen will be agreed in due course.

## 11.3 Flow of Funds at Component Level

### *11.3.1 General*

Each of the components (except for DEM) thus use two channels for funds. Funds to cover consultant fees, equipment and vehicles (including operating costs) are disbursed directly from Danida through the PSU, following procedures of reporting and accounting. These are discussed in *Section 11.4*. The terms of disbursement - frequency, size of tranche - could differ between components, although there may be administrative gains from uniformity.

Both EMG and ACI are components which seek to generate projects and programmes for investment, either through local projects to implement the GEAP, or through the establishment of model programmes, auditing, training sessions and industry investments. The proposed pattern for financing these is described below. The CEM component is located within EEAA.

### *11.3.2 Communication for Environmental Management (CEM)*

Approximately half the funds proposed for this component are required to support the development of dissemination materials, hold seminars workshops and conferences and set up demonstration projects, either directly through the EEAA or through local NGOs, as appropriate.

The funds for these activities would be disbursed through the DESF, subject to technical recommendation by EEAA, and they would be supported by appropriate reporting and auditing procedures.

### *11.3.3 Environmental Management in the Governorates (EMG)*

The flow of funds for the EMG component aims to steer a balance between decentralisation of decision making on funds and projects and maintaining rigorous accountability and transparency.

The component supports two types of expenditure; one to support the day to day operations of the EMUs, and providing strengthening and capacity development in areas such as monitoring and measurement, inspections and enforcement of regulations. A major resource in this component is for consultancy services from both expatriate and local consultants. Funds to cover the costs of local consultants and operating costs will be paid directly to the EMU special bank account by the PSU. Modest tranches for daily operating costs would be made available to cover petty operating expenses, in modest tranches of - say - DKK 5,000. Each tranche would be supported by receipts, and the next tranche will only be released when the previous one is exhausted and the expenses clearly supported by receipts. There would of course be an annual ceiling on funds disbursed this way.

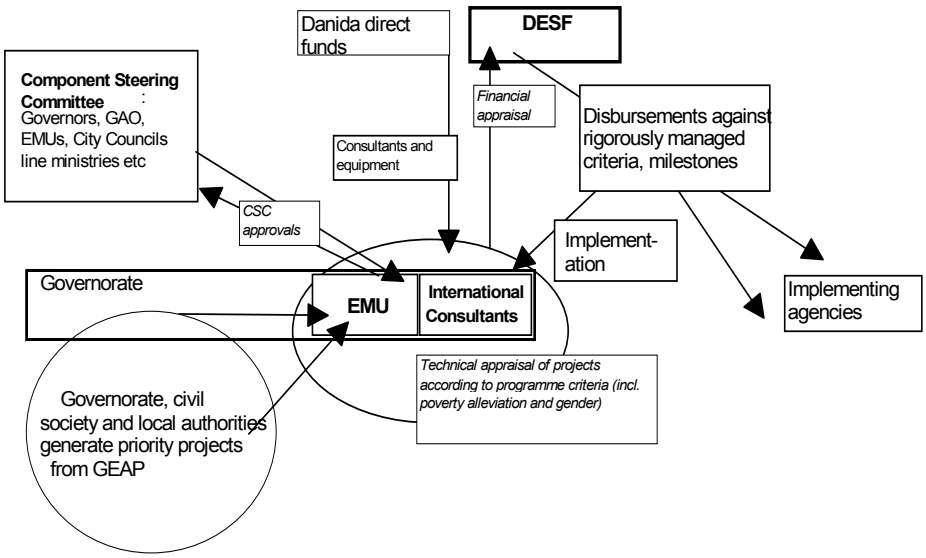
A large proportion - nearly DKK 40 million - of the funds for EMG is earmarked for demonstration projects and community based projects, and here the balance between local autonomy and accountability is most complex. Another, just as important issue, is the issue of the division of these funds between the two Governorates. It is proposed to establish a (joint) Component Steering Committee with representatives from both Governorates (Governor or his representatives), GAO, RDE, city councils, and other stakeholders where appropriate (e.g. representatives from CDAs).

Projects and priorities from the GEAP will be generated from a number of sources - the governorate and local authorities, civil society etc. The EMU will undertake a technical appraisal of the project, including assessment against a number of agreed criteria (e.g. poverty alleviation and gender focus). Any project above a certain amount (to be decided by the SPS Management during inception) will be submitted to the Steering Committee for approval. Projects below this amount can be decided upon by the EMG Component partners at governorate level (Governorate/EMU, the international consultants, partner organisation). If the project is approved (by the Steering Committee for larger projects and at governorate level for smaller projects) the project will be submitted to the DESF for financial appraisal. The technical and financial appraisal will, together, determine the disbursement schedule against clearly identified milestones. This is essential to keep transaction costs and dilution of funding to a minimum, and to ensure that the project funds are being used properly and effectively.

If the appropriate criteria are met fully, then the funds can be disbursed to a special bank account in the governorate. Two signatories will be required to draw money from the account, the Head of the EMU and the international consultant. For projects above a certain size, to be agreed, the PSU will need to authorise its acceptance.

There may also be a third window of funds from the Programme, where the EMU decides to delegate implementation to other agencies, such as NGOs. A parallel process of milestones and counter signatories will be established here.

**Figure 11.2 Flow of Funds for EMG Component**




### 11.3.4 *Achieving Cost Effective Compliance with Environment Legislation within Industry (ACI)*

The implementing agency/anchor for this component of the SPS is the Federation of Egyptian Industries (FEI).

Again, the component has a number of elements: training and capacity development among the Egyptian environmental institutions and consultancies; undertaking training programme at industry level through audits and investments in Model Projects; and support to FEI in establishing an Environmental Compliance Office (ECO).

As in the other components, a Component Steering Committee will be established with representatives from a number of institutions including EEAA. The CSC will play an important role in determining the contents of the sector programme on the basis of technical advice from the FEI and the resident Danida Advisor. As in the other components, costs of consultancy expertise will be made directly to FEI through the PSU/Danida. FEI seems to be financially sound and with clear and transparent accounting processes, so it may be appropriate to allow larger disbursements on a regular basis subject to proper reporting and audit practices. The point is that these funds are disbursed directly, and not through the DESF. DESF disbursed funds will support training courses, audits, industrial models, etc.

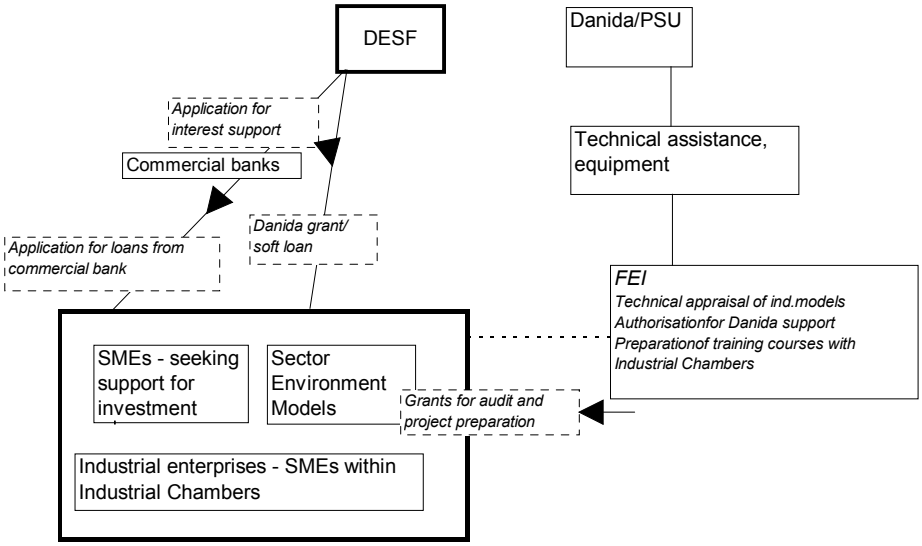
The DESF will directly support investments in the Model projects. The FEI team will submit an application for resources to the DESF subject to technical review (within FEI and the Steering Committee) and financial appraisal within the DESF. The funds within the DESF also support the costs to industry of audits taken out in the training and demonstration projects. This fund will pay for the costs of audits (effectively of-

fering industry a grant for this activity), which will include a training component. A number of industries will be identified as Sector Environment Models, and these will be eligible for a combination of grant and soft loan funding from the EPF/Danida fund.

The component will also support the interest payments of industries seeking to emulate the Model approach within their sector. The principle should be that the Polluter Pays, but some interest support is justified to compensate industries for inconvenience or costs associated with training element during the implementation stage. The proposer would submit an application to FEI for technical assessment, and if approved, interest support would be made available on any loans the proposer takes out within the commercial banking sector.

FEI will operate as a non governmental organisation, registered by the Ministry of Industry and Trade. The accounting structures of the organisation are understood to be robust and transparent, based on financial operating procedures of the Exxon Corporation. The Danida support will be accounted for under clear, separate budget heads; it may be appropriate to hold the funds in a designated bank account separate from FEI's other resources. The auditing procedures for FEI are not yet firmly in place, as they are awaiting legislation on their transition from government agency to non governmental organisation, and the auditing procedures will be set out in the law. Once again, full implementation of the flow of funds will await verification that the procedures comply with Danidas own requirements.

**Figure 11.3 Flow of Funds for the ACI Component**




Until FEI's new status is clear and their procedures understood, final proposals cannot be drawn up. The sketch indicates that support to industry would be disbursed directly from DESF but subject to technical appraisal from FEI. FEI would apply to the DESF for resources to carry out core activities of the component , as agreed in the steering committee.

## 11.4 Accounting, Regulating and Auditing Procedures

The auditing and accounting procedures required by Danida are set out clearly in the *General Guidelines for Accounting and Auditing of Grants through Governmental and Parastatal Organisations and NGOs, April 1996.*

Each of the organisations in receipt of funds will be required to produce audited annual accounts outlining the use of funds in the financial year. In the case of this programme, this will be required of:

- DESF
- EMUs in receipt of project funds under component EMG
- FEI

There are clearly set out book-keeping requirements, as well and the final accounts will be audited by Danida/PSU. Allowance to cover auditing costs will be covered from the PSU budget line for annual sector review and special studies.

Detailed accounting and reporting procedures at the level of community projects and small NGO projects will be set out to meet Danida requirements at the time of making funds available. In most cases, responsibility for management of project funds from DESF rests with the component partner.

# 12 Implementation Plan

*Figure 12.1* shows the overall SPS implementation plan. In terms of overall programming, if the three components which are already underway (SPA, KIMA (phase 1) and EIMP) go as planned they are scheduled to run until the end of 2002, 2003 and 2004 respectively.

Provided that the government agreement for the programme is ratified by the Peoples' Assembly, the PSU will be established in January 2001, with the deployment of the Chief Technical Advisor at the EEAA in Cairo. He/she will assist the SPS Director to set up the unit, employing an accountant (possibly expatriate) and local book-keeper within the first three months of operation, i.e. by the beginning of 2001. The PSU should therefore be fully functioning by early 2001, in time to support the early stages of implementation of the new components. The CTA will be followed immediately (1-2 months afterwards) by the EMG adviser. The DEM and CEM will be started up as soon as possible after the placement of the CTA and the EMG advisers.

An inception review will be carried out after an initial six months of SPS implementation. The PSU will be responsible for preparing quarterly progress reports to Danida, detailing progress with the SPS as a whole against the annual SPS workplan, and summarising information contained in quarterly component progress reports. The CTA will also be responsible for preparing an inception report at the end of the third month of his/her deployment (beginning of January 2001), which should contain the first annual SPS workplan - subsequent annual workplans should form part of January progress reports.

Programme monitoring activities will include six-monthly Coordination Committee Meetings (in March and September) and joint Egyptian/Danish Government Annual Sector Reviews (in June). The Embassy Coordinator will prepare and circulate an annual Focus Issues Paper two months prior to the sector reviews, which will form the basis for subsequent discussion at the meetings. There will also be joint Component Evaluation Meetings at the end of each component, and a special joint SPS Evaluation Meeting at the end of the fourth year of the programme (tentatively October 2004), where the impact and sustainability of the programme will be addressed, and the possibility of extending successful components may be discussed.

**Figure 12.1 Overall SPS Implementation Plan**

# Annex A

**Environmental Management Plan**

**Environmental Sector Programme Support**

**Egypt**

## Environmental Management Plan

All components of the SPS will elaborate their own Environmental Management Plans under the guidance of the PSU. The SPS focuses on Capacity Development for the Environment (CDE) and small-scale demonstration projects, following Danidas Environmental Assessment for Sustainable Development (December 1999). Most of the activities (for example training, awareness raising, procurement of office equipment etc.) will not involve any physical disturbance of the environment that might merit a B or C classification. [9]

Although all demonstration projects will be designed to secure an overall improvement in the environment, they will still be subject to Environmental Assessment if potentially significant adverse effects could result from preparation activities or during implementation. There may well be environmental remediation projects that involve earthworks, diversion of wastewater or transport of hazardous materials. The clean up of Kima Canal in Aswan, for example, would involve all of these things.

If necessary, within each Component, demonstration projects will be screened by Component Managers assisted by the CTA and assigned a category according to Egyptian criteria. If any fall into Categories B or C, an EA will be commissioned by the Component Managers and undertaken by competent local consultants. Any necessary Environmental Management Plans will be an integral part of the demonstration projects and may include:

- measures to mitigate any adverse environmental impacts of the demonstration project;
- a detailed plan of action;
- detailed planning of necessary technical input, budget and timing of any necessary measures and actions;
- training and capacity development activities.

The potential for training afforded by an eventual Environmental Assessment will be fully exploited and there is the intention to use the opportunity of an EA to build capacity in this field.

Any necessary EA will be funded from the overall Danida funds made available for demonstration projects. It is foreseen that an 8% contingency budget will be set aside for Environmental Assessments and related training and capacity development.

In case a full or partial Environmental Assessment is needed for a demonstration project, both Danida guidance notes as laid down in *Environmental Assessment for Sustainable Development* (December 1999)and Egyptian environmental assessment guidelines will be followed.

[9] According to Egyptian Environmental Assessment schemes category “A”-projects will not require EA’s, whereas “B”-projects will need parcial and “C”-projects full EA’s

# Annex B

**Job Descriptions**

**Environmental Sector Programme Support**

**Egypt**

## B.1 Job descriptions: Permanent Staff of EEAA

***Job Title 1***
The Director of the ESPS for Egypt.

***Location***
EEAA, Cairo

***The Candidate***
The SPS Director will be a senior manager who is employed full time by the EEAA and is familiar with its procedures and structure. He/she will have an excellent understanding of the environmental regulatory and policy framework in Egypt and will be very well versed with the issues involved in implementing international co-operation projects.

***Role***
The Director's role will be to ensure that the SPS is implemented efficiently such that its development aim and immediate objectives are realised. This should be achieved by active supervision of the PSU and by providing effective liaison between GoI, especially the CEO of EEAA and Danida.

***Activities***
The Director will, inter alia, be responsible for the following:

- Day to day supervision and management support of the PSU;'
- Final responsibility for authorising large items of expenditure;
- Monitoring financial reporting and disbursement of funds;
- Leading the 6-monthly discussions with the Co-ordination Committee;
- Reviewing the annual report;
- Leading the Annual SPS Review meetings;
- Liaising with the CEO and other EEAA departments;
- Initiating and supervising high level government contacts;
- Reviewing outputs and ensuring proper dissemination in government;
- Championing policy recommendations;
- Monitoring stakeholder perceptions and ensuring an appropriate response;
- Monitoring performance of the SPS against targets.

***Reporting***
The Director will report to the SPS Co-ordinator in the RDE and to the CEO of EEAA

***Inputs and Timing***
The Director will be a full time employee of EEAA who will be expected to devote at least 40% of his/her time to SPS responsibilities for the duration of the programme.

***Job Title 2***
Danida Chief Technical Advisor

***Location***
Programme Support Unit EEAA, Cairo

***Role***
The main role of the Chief Technical Advisor (CTA) will be to provide full time support to the Egyptian Director in the management and administration of the SPS. This will include managing the financial administration of the programme, and co-ordinating all technical inputs from the various components. The CTA will also be responsible for establishing and maintaining an office within the EEAA.

***Activities***
The activities of the CTA will include, inter alia, the following:

- Advising and supporting the Egyptian SPS Director in all aspects of programme administration and management, including financial, technical and logistical as required;
- Carrying out day-to-day programme administration;
- Co-ordinating and supervising all technical assistance to the programme;
- Establishing and managing and SPS office within the EEAA,
- Co-ordinating and preparing (where appropriate) all technical and financial reports to Danida throughout the course of the programme, including progress reporting;
- Undertaking awareness raising activities for the programme, e.g. delivering workshops and seminars where suitable opportunities arise.

***Reporting***
The CTA will report to the Egyptian SPS Director on a day-to-day basis, and to Danida for all contractual matters.

***Inputs and Timing***
The post will be full time in Cairo for a period of six years (72 person months), beginning January 2001.

***Job Title 3***
International consultant; long-term Accountant.

***Location***
Programme Support Unit
EEAA, Cairo.

***Role***
The main role of the Accountant will be to support the CTA and the Egyptian Director in the financial management and administration of the SPS.

***Activities***
The activities of the Accountant will include, *inter alia*, the following:

- assisting and supporting the CTA/SPS Director in the day-to-day management of the programme budget;
- providing formal and informal (ie on-the-job) training to EEAA staff in financial administration;
- assisting the CTA/SPS Director with financial reporting to Danida throughout the course of the programme, including the production of annual programme accounts;
- assisting and supporting management and disbursement of EPF support to specified Component activities.

***Reporting***
The Accountant will report directly to the CTA.

***Inputs and Timing***
The post will be part-time in Cairo for a period of six years, beginning January 2001

***Job Title 4***
Local long-term Book-keeper,.

***Location***
Programme Support Unit
EEAA, Cairo.

***Role***
The role of the local book-keeper will be to support the CTA and the Egyptian Director in the financial administration of the SPS.

***Activities***
The activities of the Book-keeper will be carried out under the supervision of the CTA, and will include, *inter alia*, the following:

- maintaining detailed accounts of all programme expenditure, with supporting documentation as required (bank statements, original receipts, payment requisitions etc);
- maintaining and managing programme cash-flow at all times, including salary and invoice payment and disbursement of funds to component managers as required;
- maintaining detailed accounts and managing disbursement of funds to all Cairo-based components;
- carrying out procurement of equipment and supplies for PSU and other Cairo-based components, and where appropriate and necessary, on behalf of Governorate-based components.

***Reporting***
The Book-keeper will report directly to the CTA.

***Inputs and Timing***
The post will be full-time in Cairo for a period of six years (72 person months), beginning January 2001.

## B.2 Job descriptions: DEM, CEM, EMG and ACI

## Decentralised Environmental Management Component.

***Job Title 1***
Long-term Management and Planning Advisor.
Decentralised Environmental Management Component.

***Location***
Central Department of Branch Affairs, EEAA, Cairo.

***Role***
The main role of the long-term management and planning advisor will be to support the EEAA, i.e. the head of the CDBA, in developing a strategy for decentralised environmental management throughout the country. The advisor will also act as the liaison between the component and the Programme Support Unit, and, in co-operation with the EEAA and RBO managers, will be responsible for progress reporting, management of expatriate consultant inputs, and supporting RBO managers in the implementation of their component activities.

***Activities***
The long-term advisor will, *inter alia*, be responsible for supporting the EEAA in the following activities:

- coordination of short term inputs
- identification of areas for decentralised environmental management for national intervention;
- development of national strategic plans for decentralised environmental management;
- development of management plans for Egyptian regions, co-ordination of GEAPs, CZM plans etc;
- prepare internal procedures and operational manuals for liaison with RBOs;
- development of reporting systems for the RBOs;
- training of staff in the Department of Branch Affairs;
- purchase of IT equipment for development of internal communication systems and for daily administrative purposes;
- purchase of vehicles and other equipment for the Department.

***Reporting***
The long-term advisor will report to the Head of the Central Department of Branch Affairs on a day-to-day basis, and also to the Chief Technical Advisor within the overall SPS Programme Support Unit.

***Inputs and Timing***
The post will be full-time in Egypt for a period of six years (72 person months), beginning January 2001.

***Job Title 2***
Local Long-term Inspection Specialist.
Decentralised Environmental Management Component.

***Location***
EEAA Regional Branch Office (RBO 1) to be selected

***Role***
The role of the local long-term inspection specialist will be to collaborate with the expatriate experts in the provision of technical expertise and formal and informal training to RBO staff in the implementation of environmental monitoring, inspection and auditing of local industries.

***Activities***
Under the supervision of RBO management and expatriate experts, the long-term inspection specialists will, *inter alia*, carry out the following activities:

- development of long-term training programme for RBO staff (formal and informal, ie on-the-job);
- preparation of operational manual for field inspectors;
- selection of suitable local industries and development of field monitoring and inspection programme;
- assist and train RBO staff to implement inspection programme, ie through monitoring, inspection and auditing of selected industries.

***Reporting***
The local long-term inspection specialist will report to the Head of the Regional Branch Office on a day-to-day basis, and also to the Long-term Management and Planning Advisor within the Central Department of Branch Affairs in Cairo.

***Inputs and Timing***
The post will be full-time for a period of three years (36 person months), beginning January 2001.

***Job Title 3***
Local Long-term Inspection Specialist.
Decentralised Environmental Management Component.

***Location***
EEAA Regional Branch Office (RBO 2) to be selected.

***Role***
The role of the local long-term inspection specialist will be to collaborate with the expatriate experts in the provision of technical expertise and formal and informal training to RBO staff in the implementation of environmental monitoring, inspection and auditing of local industries.

***Activities***
Under the supervision of RBO management and expatriate experts, the long-term inspection specialists will, *inter alia*, carry out the following activities:

- development of long-term training programme for RBO staff (formal and informal, ie on-the-job);
- preparation of operational manual for field inspectors;
- selection of suitable local industries and development of field monitoring and inspection programme;
- assist and train RBO staff to implement inspection programme, ie through monitoring, inspection and auditing of selected industries.

***Reporting***
The local long-term inspection specialist will report to the Head of the Regional Branch Office on a day-to-day basis, and also to the Long-term Management and Planning Advisor within the Central Department of Branch Affairs in Cairo.

***Inputs and Timing***

The post will be full-time for a period of three years (36 person months), beginning January 2002.

***Job Title 4***
Local Long-term Legal Consultant
Decentralised Environmental Management Component.

***Location***
Central Department of Branches Affairs, EEAA, Cairo.

***Role***
The role of the local long-term legal consultant will be to advise EEAA on all legal aspects of the decentralisation programme, including the enforcement of environmental legislation at the appropriate local level.

***Activities***
The activities of the long-term legal consultant will include the provision of legal advice to EEAA on:

- strengthening linkages between national environment policy and enforcement at the local level, eg the implementation of law #4/94 by Governorate Environment Affairs Offices; and

- strengthening administrative links between the EEAA/RBOs and participating Governorates, city councils, municipalities etc.

***Reporting***
The local long-term legal consultant will report directly to the Long-term Management and Planning Advisor, and therein to the Head of the Central Department of Branch Affairs .

***Inputs and Timing***
The post will be full-time in Cairo for a period of three years (36 person months), beginning January 2001.

***Job Title 5***
Local Long-term Environmental Impact Assessment Specialist.
Decentralised Environmental Management Component.

***Location***
Central Department of Branches Affairs, EEAA, Cairo.

***Role***
The role of the local long-term EA specialist will be to collaborate with the expatriate expert team in providing technical support and assistance to the EEAA in the strengthening of EA capacity at RBO level.

***Activities***
The activities of the local EA specialist will include, *inter alia*, the following:

- development of long-term EA training programme for EEAA/RBO staff (formal and informal, i.e. on-the-job);
- preparation of an operational EA manual for RBOs;
- provision of ongoing technical assistance and training to EEAA/RBO staff in carrying out EAs.

***Reporting***
The local long-term EA specialist will report directly to the Long-term Management and Planning Advisor, and therein to the Head of the Central Department of Branch Affairs .

***Inputs and Timing***
The post will be full-time in Cairo for a period of three years (36 person months), beginning January 2002.

## Communication for Environmental Management Component

***Job Title 1***
Expatriate Long-term Communications and Management Advisor.
Communication for Environmental Management Component.

***Location***
Central Department for Environmental Communication and Awareness (CDECA), EEAA, Cairo.

***Role***
The role of the long-term communications and management advisor will be to assist the EEAA to strengthen their role in the collection, interpretation and dissemination of environmental information to decision makers at the national and local levels, and to strengthen the participation of NGOs/CDAs, local communities and industry in environmental management within the two selected Governorates. The advisor will also help to co-ordinate the component activities, and to identify and plan short-term technical inputs to the component.

***Activities***
The activities of the long-term advisor will include, *inter alia*, co-ordinating and managing the following:

- training relevant EEAA/EMU staff in communication methodologies and desk-top publishing;
- production and dissemination of 10 media packages targeting decision makers, in support of other SPS components, technical EEAA departments and EMUs;
- assisting the Governorate EOAs to produce 10 media packages targeting NGOs/CDAs, local communities and selected industries within selected Governorates, in support of other SPS components, technical EEAA departments and EMUs;
- develop and implement a financial strategy for EEAA/EMU environmental communication programmes;
- establish a "window" for funding relevant NGO activities which are not covered by other SPS components (set criteria, review candidates and provide funding).

***Reporting***
The long-term advisor will report to the Head of the CDECA on a day-to-day basis, and also to the Chief Technical Advisor within the overall SPS Programme Support Unit.

***Inputs and Timing***
The post will be full-time in Egypt for a period of six years (72 person months), beginning January 2001.

***Job Title 2***
Local Long-term Communications and Management Advisor.
Communication for Environmental Management Component.

***Location***
Central Department for Environmental Communication and Awareness (CDECA), EEAA, Cairo.

***Role***
The role of the local long-term communications and management advisor will be to support the expatriate long-term advisor to strengthen EEAAs role in the collection, interpretation and dissemination of environmental information to decision makers at the national and local levels, and to strengthen the participation of NGOs/CDAs, local communities and industry in environmental management within the two selected Governorates.

***Activities***
The activities of the local advisor will include assisting the expatriate long-term advisor to implement the following:

- train relevant EEAA/EMU staff in communication methodologies and desk-top publishing;
- production and dissemination of 10 media packages targeting decision makers, in support of other SPS components, technical EEAA departments and EMUs;
- assisting the Governorate EOAs to produce 10 media packages targeting NGOs/CDAs, local communities and selected industries within selected Governorates, in support of other SPS components, technical EEAA departments and EMUs;
- develop and implement a financial strategy for EEAA/EMU environmental communication programmes;
- establish a "window" for funding relevant NGO activities which are not covered by other SPS components (set criteria, review candidate projects and provide funding).

***Reporting***
The local advisor will report to the expatriate Communications and Management Advisor at the CDECA.

***Inputs and Timing***
The post will be full-time in Cairo for a period of five years (60 person months), beginning January 2002.

***Job Title 3***
Local Long-term Communications and Social Survey Consultant.
Communication for Environmental Management Component.

***Location***
Governorate EOA, Aswan.

***Role***
The role of the local long-term communications and social survey consultant will be to support the Head of the EOA in strengthening the participation of NGOs/CDAs, local communities and industry in environmental management at the Governorate level.

***Activities***
The activities of the local consultant will include assisting the EOA and the expatriate Communications and Management Advisor to implement the following:

- production of 10 media packages targeting NGOs/CDAs, local communities and selected industries within selected Governorates, in support of other SPS components, technical EEAA departments and EMUs (including the design and implementation of target group surveys);
- establish a "window" for funding relevant NGO activities which are not covered by other SPS components (set criteria, review candidate projects and provide funding).

***Reporting***
The local consultant will report to the Head of the EOA.

***Inputs and Timing***
The post will be full-time in Aswan for a period of 2 ½ years (30 person months), beginning January 2003.

***Job Title 4***
Local Long-term Communications and Social Survey Consultant.
Communication for Environmental Management Component.

***Location***
Governorate EOA, Beni Suaf.

***Role***
The role of the local long-term communications and social survey consultant will be to support the Head of the EOA in strengthening the participation of NGOs/CDAs, local communities and industry in environmental management at the Governorate level.

***Activities***
The activities of the local consultant will include assisting the EOA and the expatriate Communications and Management Advisor to implement the following:

- production of 10 media packages targeting NGOs/CDAs, local communities and selected industries within selected Governorates, in support of other SPS components, technical EEAA departments and EMUs (including the design and implementation of target group surveys);
- establish a "window" for funding relevant NGO activities which are not covered by other SPS components (set criteria, review candidate projects and provide funding).

***Reporting***
The local consultant will report to the Head of the EOA.

***Inputs and Timing***
The post will be full-time in Beni Suaf for a period of 2 ½ years (30 person months), beginning January 2003.

## Environmental Management in the Governorates Component.

***Job Title 1***
Danida GEAP Advisor, Environmental Management in the Governorates Component.

***Location***
The advisor will be based full-time in the GEAP Advisory Unit, EEAA, Cairo. However, at least one third of his/her time will be spent with each of the Governorate EMUs (in Aswan and Beni Suef).

***Role***
The main role of the long-term GEAP advisor will be to help ensure that the GEAP process is established and functioning effectively at both the national (EEAA) and local (Governorate) level, and that actions to address environmental priorities are being implemented in the selected Governorates, and replicated elsewhere in Egypt. In addition, the advisor will help to ensure that the two selected Governorate EMUs are equipped and functioning effectively, ie managing a participatory GEAP process, enforcing regulations, monitoring the state of the environment, implementing national policies and co-ordinating investment and development activities.

***Activities***
The activities of the long-term GEAP advisor will include, *inter alia*, co-ordination and management of the following:

- establishing an effective Capacity Development for the Environment (CDE) programme for each Governorate (identifying stakeholders, forming committees, working groups etc);
- remediating environmental problems in the most urgent hotspots;
- producing, disseminating and regularly updating a GEAP document;
- implementing GEAP priorities (including selected showcase projects)
- replicating GEAP priority projects elsewhere in the Governorate and outside (e.g. involving seminars, workshops, project preparation etc);
- ensuring that adequate staff and management systems are in place in each of the Governorate EMUs;
- establishing and formalising (e.g. through directives, communication protocols etc) an effective working relationship between EEAA and Governorate EMUs;
- securing sustainable funding for the EMUs (post SPS);
- equipping the EMUs for field sampling, information management etc;
- developing and implementing an industrial inspection and licensing programme.

***Reporting***
The long-term GEAP advisor will report to the manager of EEAA GEAP Advisory Unit on a day-to-day basis, and also to the Chief Technical Advisor within the overall SPS Programme Support Unit.

***Inputs and Timing***
The post will be full-time in Egypt for a period of 6 years (72 person months), beginning early 2001.

***Job Title 2***
Local resident GEAP Advisor, Environmental Management in the Governorates Component.

***Location***
Governorate EMU, Aswan.

***Role***
The role of the local GEAP advisor will be to assist the EEAA GEAP advisor to ensure that Governorate EMU is equipped and functioning effectively, ie managing a participatory GEAP process, enforcing regulations, monitoring the state of the environment, implementing national policies and co-ordinating investment and development activities.

***Activities***
The activities of the long-term GEAP advisor will include, *inter alia*, assisting the EEAA GEAP advisor with the co-ordination and management of the following:

- establishing an effective Capacity Development for the Environment (CDE) programme for the Governorate (identifying stakeholders, forming committees, working groups etc);
- remediating environmental problems in the most urgent hotspots;
- producing, disseminating and regularly updating a GEAP document;
- implementing GEAP priorities (including selected showcase projects)
- replicating GEAP priority projects elsewhere in the Governorate and outside (eg involving seminars, workshops, project preparation etc);
- ensuring that adequate staff and management systems are in place;
- equipping the EMU for field sampling, information management etc;
- developing and implementing an industrial inspection and licensing programme.

***Reporting***
The local GEAP advisor will report to the expatriate GEAP Advisor at the EEAA GEAP Advisory Unit in Cairo.

***Inputs and Timing***
The post will be full-time in Aswan for a period of six years (72 person months), beginning early 2001.

***Job Title 3***
Local resident GEAP Advisor, Environmental Management in the Governorates Component.

***Location***
Governorate EMU, Beni Suef.

***Role***
The role of the local GEAP advisor will be to assist the EEAA GEAP advisor to ensure that Governorate EMU is equipped and functioning effectively, ie managing a participatory GEAP process, enforcing regulations, monitoring the state of the environment, implementing national policies and co-ordinating investment and development activities.

***Activities***
The activities of the long-term GEAP advisor will include, *inter alia*, assisting the EEAA GEAP advisor with the co-ordination and management of the following:

- establishing an effective Capacity Development for the Environment (CDE) programme for the Governorate (identifying stakeholders, forming committees, working groups etc);
- remediating environmental problems in the most urgent hotspots;
- producing, disseminating and regularly updating a GEAP document;
- implementing GEAP priorities (including selected showcase projects)
- replicating GEAP priority projects elsewhere in the Governorate and outside (eg involving seminars, workshops, project preparation etc);
- ensuring that adequate staff and management systems are in place;
- equipping the EMU for field sampling, information management etc;
- developing and implementing an industrial inspection and licensing programme.

***Reporting***

The local GEAP advisor will report to the EOA management on a day-to-day basis, and also to the expatriate GEAP Advisor at the EEAA GEAP Advisory Unit in Cairo.

***Inputs and Timing***
The post will be full-time in Beni Suef for a period of six years (72 person months), beginning early 2001.

***Job Title 4***
Local Long-term Community Mobilisation and Communication Consultant
Environmental Management in the Governorates Component

***Location***
Environmental Management Unit, Beni Suef.

***Role***
The role of the Local Long-term Community Mobilisation and Communication Consultant will be to support the head of the EMU in strengthening the participation of NGOs/CDAs, local communities and industry in environmental management at the governorate level.

***Activities***
The activities of the Local Adviser will be to assist the EMUs implement the following activities:

- Preparation of a implementation showcase projects for community-based environmental management, based on the priorities identified in the GEAP.
- Training relevant EMU and partner stakeholder staff in community mobilisation techniques. This activity will be undertaken in collaboration with the Communication for Environmental Management Component.
- The production information packages targeting implementing stakeholders and community members. This activity will be undertaken in collaboration with the CEM Component. .
- Development of participatory monitoring systems to assess the impacts of the community-based management strategies.
- Establishing a "window" for funding relevant NGO activities, which are not supported through other SPS components, including the identification, and subsequent monitoring, of NGOs.

***Reporting***
The Local Consultant will report to the head of the EMU. Through the GEAP Adviser he or she will closely liase with the international and local Communication and Management Advisers in the CEM Component.

***Inputs and Timing***
The post will be full-time in Egypt for a period of three years (36 person months), commencing at the start of year two of the component implementation

***Job Title5***
Local Long-term Community Mobilisation and Communication Consultant
Environmental Management in the Governorates Component

***Location***
Environmental Management Unit, Aswan

***Role***
The role of the Local Long-term Community Mobilisation and Communication Consultant will be to support the head of the EMU in strengthening the participation of NGOs/CDAs, local communities and industry in environmental management at the governorate level.

***Activities***
The activities of the Local Adviser will be to assist the EMUs implement the following activities:

- Preparation of a implementation showcase projects for community-based environmental management, based on the priorities identified in the GEAP.
- Training relevant EMU and partner stakeholder staff in community mobilisation techniques. This activity will be undertaken in collaboration with the Communication for Environmental Management Component.
- The production information packages targeting implementing stakeholders and community members. This activity will be undertaken in collaboration with the CEM Component. .
- Development of participatory monitoring systems to assess the impacts of the community-based management strategies.
- Establishing a "window" for funding relevant NGO activities, which are not supported through other SPS components, including the identification, and subsequent monitoring, of NGOs.

***Reporting***
The Local Consultant will report to the head of the EMU. Through the GEAP Adviser he or she will closely liase with the international and local Communication and Management Advisers in the CEM Component.

***Inputs and Timing***
The post will be full-time in Egypt for a period of three years (36 person months), commencing at the start of year two of the component implementation

## Achieving Cost Effective Compliance with Environmental Regulations within Industry

***Job Title 1***
Long-term International Consultant (environmental management in industry). Achieving Cost Effective Compliance with Environmental Regulations within Industry Component.

***Location***
Federation of Egyptian Industries (FEI), Cairo.

***Qualifications***
Technical consultant or industrial manager with extensive experience from technical / industrial environmental management. Knowledge of environmental communication, quality systems (ISO 9000/14000), organisational changes, and management.

***Role***
The role of the international, long-term consultant will be to assist the FEI in getting SMEs to use cleaner production to improve industrial compliance with environmental regulations. The main objectives of the component is

1. creating awareness and usage of cleaner production (CP) in at least three sectors (Chambers) of the Egyptian industry;
2. getting Egyptian technical consultants promote and implement cleaner production (CP) in the industry, and
3. establishing an Environmental Compliance Office (ECO) at FEI to serve as a link between the industry, the ETC, EEAA, and financial facilities.

The advisor will assist the co-ordination of all component activities, and identify and plan short-term technical inputs to the component.

***Activities***
The implementation strategy for the component is based on the success of eight blocks of activities, carried out in sequence or in parallel:

1. Identification of three industrial sectors to participate in the component by the ECO of FEI.
2. Establishment of an environmental compliance office (ECO) at FEI at the start of the component.
3. Development and co-ordination of awareness raising strategies of environmental management schemes (EMS) by the ECO
4. Preparation and implementation of environmental management schemes in approx. 90 enterprises, based on environmental action plans designed for each enterprise.
5. Selection of the best performing among the 90 industries where environmental management schemes have been developed. These are eligible for support from the financial facility.
6. Establishment of a financial facility to provide loans and grants for larger investments in cleaner technology and end-of-pipe solution to comply with Law 4/94.
7. Development of a financial, long-term sustainability strategy for ECO, which will start 2-3 years into the programme.
8. Involvement of Egyptian technical consultants in all relevant activities throughout the component.

***Reporting***
The Consultant will report to the Director of the ECO on a day-to-day basis, and also to the Chief Technical Advisor from the ESPS Programme Support Unit.

***Inputs and Timing***
The post will be full-time in Cairo for a period of six years, beginning January 2001.

***Job Title 2***
ECO staff Industrial Sector Specialists (3 posts).
Achieving Cost Effective Compliance with Environmental Regulations within Industry Component.

***Location***
Federation of Egyptian Industries (FEI), Cairo.

***Qualifications***
Process engineer with technical, working experience from an industrial plant in the sector in question. Knowledge of the process equipment, cleaner technology options, and pollution prevention measures.

***Role***
The role of the ECO staff sector specialists will be to develop the environmental management capacity and industrial sector expertise of the FEI. They will create a network between the SMEs, industrial chamber staff, the Egyptian technical consultants, and financial facilities. They will support SMEs to develop environmental management schemes, implement cleaner production and even becoming sector models. Immediately after being retained, they will receive 2 months training in cleaner production concepts, quality audits and other subjects of relevance to their task.

***Activities***
The activities of the sector specialists will include, *inter alia*, assisting the ECO Director/TA to carry out the following:

1. Planning and participation in awareness programme, workshops, meeting etc.
2. Facilitating environmental audits of the EMS.
3. Assisting the preparation of industrial applications for loan /grant approval and fulfilling the conditions in relation to this.
4. Facilitating grants /loans to industry.
5. Developing monitoring practices to collect the experiences gained and continuously work to improve the entire process.

***Reporting***
The sector specialists will report to the Director of ECO within the FEI.

***Inputs and Timing***
The sector specialist posts will be full-time in Cairo for a period of three years (36 person months), beginning January 2001.