

Final Report

**EPIQ Environmental Policy and
Institutional Strengthening IQC**

USAID/Egypt

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Final Report

EPIQ Environmental Policy and Institutional Strengthening IQC

By
International Resources Group

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For
USAID/Egypt

Environmental Policy and Institutional Strengthening Indefinite Quantity Contract (EPIQ)

Partners: International Resources Group, Winrock International, and
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1. Introduction

1.1 Background

During 1997 USAID/Egypt, in collaboration with the Egyptian Environmental Affairs Agency (EEAA), the Ministry of Petroleum (MOP), the Tourism Development Authority (TDA), and the Organization for Energy Planning (OEP), and with the cooperation of numerous Egyptian non-governmental organizations (NGOs), private industry groups, and Governorates undertook a comprehensive assessment of environmental management in Egypt (*Environmental Sector Assessment*, 1997). The purpose of the environmental assessment was to develop the analytical basis for the joint GOE-USAID design of an environmental policy and institutional reform program. The planned new activity, termed the Egyptian Environmental Policy Program (EEPP), is intended to support the Government of Egypt (GOE) in its efforts to design and implement a wide array of environmental policy reforms and to strengthen the institutions upon which effective environmental management depends.

To maintain the momentum on environmental policy generated during the *Environmental Sector Assessment* and to address key policy and institutional capacity issues while the policy program's design was being completed, USAID acquired short-term technical assistance resources (initially covering one year, January 31, 1998 – December 31, 1998; later extended to August 31, 1999) from the Global Bureau Environmental Policy and Institutional Strengthening Indefinite Quantity Contract (PCE-I-00-96-000002-00 (EPIQ)). This interim technical assistance provided a total of \$3,045,527. in resources to help achieve a transition from specific project activities to broader policy measures for sustainable development.

1.2 Objectives

The major objectives of the interim technical assistance were (i) institutional strengthening and capacity building among key GOE environmental agencies in anticipation of the proposed EEPP; (ii) provision of pre-implementation technical support to further refine the policy instruments identified in the sector assessment; and (iii) continued support of project-level activities for environmentally sustainable tourism (EST) development along the Red Sea coast.

The specific activities supporting these objectives comprised the following:

- **Environmental Protection Fund:** Technical assistance to the EEAA to analyze options for using the Environmental Protection Fund to strengthen support for financing environmental investment.
- **Municipal Solid Waste Management:** Technical assistance to the Governorate of Alexandria to analyze the economic and institutional requirements for a public-private sector partnership model for improving solid waste management.

- **Environmentally Sustainable Tourism:** Technical assistance to the EEAA and to the TDA to support on-going activities under the current pilot EST activity and also transition support for follow-on EST policy activities.
- **Technical Support for Design of the Egyptian Environmental Policy Program:** Technical assistance to the EEAA and to USAID for completing the design of the EEPP.

1.3 Strategic Objectives

The interim technical assistance activities were consistent with and supported achievement of USAID/Egypt's two environmental strategic objectives (SOs):

- SO7: Reduced generation of air pollution, which focuses on reducing urban and industrial pollution and promoting energy efficiency; and
- SO8: Natural Resources Managed for Environmental Sustainability, which centers on the protection of Red Sea marine and coastal habitats.

The Environmental Protection Fund and municipal solid waste management activities were designed to support GOE efforts to reduce industrial and urban pollution, respectively. The environmentally sustainable tourism activities were designed to promote protection of Red Sea marine and coastal resources.

2. Project Activities

The following summary discussion of the interim technical assistance activities completed is organized by strategic objective.

2.1 Strategic Objective 7 Activities:

2.1.1 Activity 1 - Environmental Protection Fund

Description:

The **Environmental Sector Assessment** prepared for USAID/Egypt in 1997 emphasized the need to fully activate the Environmental Protection Fund (EPF) established by Law 4/1994 in order to increase the availability of financing for environmental investments. The Ministry of Environment/EEAA recognizes the EPF as a priority, and the EEPP includes activating the EPF as one of its objectives (See Objective 5). USAID committed in early 1998 to providing technical assistance for activating the fund. In order to follow through on this commitment, the PMG identified support for the EPF as an activity in its original Work Plan (3/31/98) for the interim technical assistance activities.

Activities:

The PMG provided Dr. Glen Anderson, an environmental economist and expert in environmental funds, to lead the technical support to the EPF. With the support of local team members Ms. Nevine Henein and Mr. Akram El Hosseiny, Dr. Anderson prepared a work plan, in August 1998, for technical assistance with the objective of activating the fund by July 1, 1999. During October 1998, the local team interviewed all department heads at the EEAA to identify their long- and short-term priorities and their funding needs in the coming period. The team subsequently prepared a report summarizing and analyzing these findings in preparation for the development of a vision statement and strategy for the fund.

In late 1998 and early 1999, the PMG team worked with Ms. Hoda Sabry, the EEAA Environmental Protection Fund Manager, to prepare a **vision statement** and a preliminary **strategy** for the EPF and to develop a **revenue enhancement strategy** for the fund. The team also worked on the design of a pilot financing project to be implemented by the fund and continued to work in close cooperation with the DANIDA-financed Organization Support Program to develop the fund's **operating procedures**.

Accomplishments:

Having adopted a **vision statement** and **strategy** for the EPF and having advanced preparation of the fund's **operating procedures**, the EEAA is positioned to activate the EPF once the Fund Management Committee (FMC) has been appointed and the revised financial regulations have been approved by the Ministry of Finance.

Impact/Results:

The PMG has provided the necessary technical support for EEAA to activate the EPF. The remaining issues that need to be addressed before fully operationalizing up the fund are managerial and political (i.e., appointing the FMC, staffing the EPF unit, approving the financial regulations) rather than technical.

Challenges and Lessons Learned:

The delays in activating the EPF have come from dealing with the managerial/political issues and not with the technical questions that have had to be resolved.

2.1.2 Activity 2 - Municipal Solid Waste Management

Description:

The *Environmental Sector Assessment* prepared for USAID/Egypt in 1997 identified the environmental problems resulting from improper management of municipal solid waste. The Ministry of Environment/EEAA designated improving solid waste management in Egypt a top priority in 1999. The EEPP includes this priority as one of its objectives (See Objective 11). At the request of the Chairman of the Local Council in Alexandria, USAID first committed in early 1998 to providing technical assistance for improving solid waste management in the Alexandria Governorate. In order to follow through on this commitment, the PMG identified solid waste management as an activity in its original Work Plan (3/31/98) for the interim technical assistance activities.

Activities:

The PMG initiated this activity in April 1998, providing a solid waste management specialist, Mr. James Dohrman, and an economist, Dr. Doug Krieger, to undertake an analysis of economic and institutional options for improving solid waste management. The results of their work, *Economic Analysis of Municipal Solid Waste Service Options in Alexandria* (July 1998), laid the groundwork for continuing technical support. In October 1998, the PMG provided two solid waste management engineers, Mr. Leo Larochelle and Mr. Charles Peterson, who worked

with the local team in Alexandria, Dr. Shaker Helmi and Dr. Salah Hassouna, on completing the solid waste management initiative begun in April. Working with local officials, representatives of the private sector, and various non-governmental organizations (NGOs) active in solid waste management, the team prepared an assessment of the existing conditions in Alexandria, a set of recommendations for addressing existing problems in waste management, and an implementation plan for developing, on a step-by-step basis over a two-year period, an integrated waste management system.

The PMG team delivered their draft **Municipal Solid Waste Management Implementation Plan** to USAID in November 1998. The draft plan was shared with Chairman AbouAkkada of the Local Council in Alexandria, who was designated by the Governor of Alexandria to take the lead on waste management in the governorate and had shepherded the work of the consultant team throughout the process. Comments received from USAID, the chairman, and the local team were incorporated into the final version.

In December 1998, the local team worked with Chairman AbouAkkada to plan a **one-day workshop on public-private partnership** for improving solid waste management. The workshop was intended to present the draft implementation plan and to bring together all the relevant stakeholders (i.e., local officials, business community, NGOs) on solid waste management. Under the auspices of Governor Mahgoud of Alexandria, the workshop was held on December 16, 1998, with the participation of Chairman AbouAkkada and a number of members of the Local Council, key representatives of the business community, several NGOs active in solid waste management, a representative of the EEAA, and others. Mr. Leo Larochelle and the local team presented the draft plan for public discussion.

In the first several months of 1999, the local solid waste team, Dr. Shaker Helmi and Dr. Salah Hassouna, worked on the data collection (e.g., full cost accounting, inventory of local assets, mapping) necessary for beginning implementation of the waste management plan. The local team delivered its report, *Full Cost Accounting of Solid Waste Management in Alexandria*, in May 1999. In late May 1999, a team from the Institute for Public-Private Partnership (IP3), Mr. Kirk Ellis and Mr. Johannes Kassahun, worked with the local team to analyze the data and determine the critical decisions that needed to be made by local officials in order to promote private sector participation in waste management.

In parallel with the technical assistance provided to Alexandria, the PMG provided assistance to the EEAA for preparation and dissemination of its national solid waste management strategy. Using the Development Training 2 Project to finance the activity, the PMG worked with the EEAA to plan a series of workshops for disseminating the national strategy and promoting public private partnership in solid waste management throughout the country. The first of this series, a two-day workshop for national policy makers, was held in July 1999, followed by a five-day implementation workshop held in Alexandria. Additional workshops were planned in Ismalia and Luxor in early September and in Cairo in October.

Accomplishments:

The **Municipal Solid Waste Management Implementation Plan** prepared by the PMG and the local team in Alexandria provided the Governorate of Alexandria with the blueprint for improving the provision of solid waste management services through improved management, increased private sector participation, and enhanced cost recovery. The series of workshops on public-private partnerships in solid waste management provided the EEAA with the opportunity to disseminate its draft national strategy, to consult relevant stakeholders throughout the country, and to promote increased private sector participation in waste management in the governorates.

Impact/Results:

The modest amount of technical assistance the PMG provided has catalyzed action on solid waste management in Egypt, both at the local level with the advances made by the Governorate of Alexandria and at the national level with **dissemination and consultation on the EEAA's 'national strategy** for solid waste management. The initiative in Alexandria may serve as a **model for the rest of the country in public-private partnerships for solid waste management**, in adopting a mechanism for financing solid waste service improvements, and in the public consultative process that took place.

Challenges and Lessons Learned:

Under the interim technical assistance, the PMG had difficulty providing the regular and sustained technical support needed by the Governorate of Alexandria. For various reasons, the unavailability of short-term consultants resulted in three different teams of consultants working on the Alexandria initiative. A better mechanism will need to be found for providing such technical support under the EEPP.

2.1.3 Activity 3 - 10th of Ramadan Environmental Management System

Description:

The **Environmental Sector Assessment** prepared for USAID/Egypt in 1997 identified the need to promote environmental management systems (EMS) to encourage environmental compliance in the new industrial cities in Egypt. The Ministry of Environment/EEAA supported the development of a pilot EMS in 10th of Ramadan City. The EEPP includes promoting such voluntary compliance mechanisms as one of its objectives (See Objective 9).

Activities:

The PMG undertook this activity - supporting implementation of the Environmental Management System (EMS) in 10th of Ramadan City - in the fourth quarter of 1998, when it hired Mr. Mostafa Eissa. Mr. Eissa had initiated this program in 10th of Ramadan City under the USAID-financed Environmental Pollution Prevention Project (EP3).

Mr. Eissa oversaw finalization of the EMS guidelines and participated in a number of implementation meetings with stakeholders (i.e., members of the 10th of Ramadan investors association) at the EEAA/Technical Cooperation Office for Environment.(TCOE). Although all relevant agencies had signed the Memorandum of Understanding establishing the EMS in 10th of Ramadan City, the local officials and investors continued to need technical assistance in EMS implementation.

In addition, Mr. Eissa oversaw the process of translating the two volumes of the draft EMS guidelines into Arabic so that they could be used easily by the investors.

Accomplishments:

The translation of the EMS guidelines and technical assistance provided by the PMG facilitated implementation of the EMS in 10th of Ramadan City.

Impact/Results:

The technical assistance provided by the PMG enabled USAID to continue to demonstrate its commitment to the objectives of the EMS until more fully developed support could be provided under Objective 9 of the EEPP.

Challenges and Lessons Learned:

The Ministry of Environment/EEAA's commitment to EMS has been overshadowed by its new initiative for fast-track compliance/enforcement measures. Before the EEPP's technical assistance for voluntary compliance initiatives, such as EMS, can be finalized, this apparent contradiction in approaches needs to be addressed.

2.2 Strategic Objective 8 Activities:

2.2.1 Activity 4 - Environmentally Sustainable Tourism – EEAA

Description:

The EEAA's environmentally sustainable tourism activities on the Red Sea coast originated in 1996 with the USAID's Environmentally Sustainable Tourism (EST) Project program within the Red Sea Governorate in partnership with the Egyptian Environmental Affairs Authority's Nature Protectorates Unit and the Tourism Development Authority. The Ministry of Environment/EEAA considers promoting environmentally sustainable tourism development a priority. The EEPP reflects this in one of the objectives (See Objective 12). The PMG identified environmentally sustainable tourism as an activity in its original Work Plan (3/31/98) for the (1996-Dec 1997).

Activities/Accomplishments:

The major PMG activities supporting EEAA efforts at promoting environmentally sustainable tourism on the Red Sea coast were ranger operations, supporting HEPCA in their work with EEAA to establish the mooring program, the coral reef monitoring program, the Crown-of-Thorns starfish control program, and support for the declaration of the Red Sea Marine Park. These activities and their accomplishments are described below.

EEAA Ranger Operations. The rangers in Hurghada executed marine patrols approximately 184 out of 244 days between January 1999 and the end of August 1999. The patrols monitored the use of the mooring systems and supervised compliance with Law 4 and Law 102. The PMG completed additional procurements totaling \$120,000 in support of the rangers' field operations, including two new vehicles, a small boat with an engine and air compressor for use on field missions, office computers, building signs, cameras and SCUBA equipment.

The PMG provided training that included sending two rangers overseas (Australia) for short courses and providing a continuous program of water and scuba skills to develop and enhance the abilities and safety of the rangers. In addition, the PMG developed an extensive training program to be implemented independently under the USAID Development Training II Program.

The PMG developed a Safari Program for controlled recreational diving access to the Red Sea Islands in collaboration with the Red Sea Governorate, resulting in a total of 65 new diving safaris to the islands in one year, carrying more than 1000 visitors, generating an income to the Environmental Fund of almost \$40,000. The PMG program supported other miscellaneous activities, including obtaining underwater photographic evidence of boat accidents, reviewing an Environmental Impact Assessment, maintaining the boats and vehicles for the EEAA Red Sea

Program, managing all of the Red Sea building facilities for the Rangers, and providing administrative support for drafting and translating of documents, telephones, and petty cash, etc.

HEPCA. With PMG support, HEPCA has become better organized and has begun expanding its activities outside of the mooring program. HEPCA has received another USAID-supported grant to promote environmental awareness, continues to publish a regular newsletter, and is involved in several local marine-related committees. The PMG sent the Executive Director of HEPCA to the U.S. for a short-term training program for NGOs. The HEPCA staff have received training on mooring-installations and computer-training classes administered under the DT2 Project.

Mooring Program. At the end of the PMG program, there were 500 moorings installed at more than 100 dive sites in the Red Sea, stretching from El Gouna down past the Marsa Alam region, and including the five far offshore islands. Almost 60% of those moorings were installed during the last 20 months of the PMG transitional project. This mooring system is the largest system operated under a single jurisdiction and management in the world. The HEPCA Technical Team, under the USAID contract, has installed and maintained the system with close coordination and approval from EEAA. This has included more than 7000 documented visual inspections of the moorings (from the boat or in water) with subsequent maintenance work, as needed.

A detailed ACCESS (PC) database of the work was created that enabled HEPCA and USAID to make cost projections and budgetary decisions, as well as assisting the Technical Team to plan their maintenance work. In November of 1998 a Mooring Workshop was held in Hurghada to discuss the existing issues and the future of the Red Sea and National Mooring Programs, thereby providing EEAA with input and options for their decision-making on this issue. Subsequent to the workshop, PMG staff prepared and presented EEAA with a more detailed 41-page mooring report with a complete background of the program, and specific workplan recommendations, most of the latter which have since been accomplished.

Coral Reef Monitoring Program. During the EST Project Phase (1996-97), a Rapid Underwater Assessment was executed at more than 40 reef sites being actively used for diving to assist in determining where the first mooring systems should be placed to maximize conservation objectives. One aspect of the data collected, the ratio of hard coral-cover to soft coral-cover to other substrate-cover (named the Coral Reef Index), was calculated as an indicator for monitoring the coral status at popular diving sites. A statistically significant subset of the sites (11 sites in Hurghada and 10 in Safaga) were re-monitored under the PMG Program in 1998 and the Coral Reef Index Ratios were compared. Although the differences seen are within the natural variability of the reef ecosystem, most sites in Hurghada and Safaga indicated good news: a slight increase or no-net-loss of the area covered by hard or soft corals between 1996 and 1998.

EEAA Crown-of-Thorns Starfish Control Program. The PMG supported this activity in the Red Sea significantly in 1998 and at a reduced level in 1999. Support in 1998 included providing divers, scientists and record-keeping for the field operations to collect more than 7500 animals and data; providing logistical coordination and support, analyzing the size-frequency

data for more than 2000 animals collected; and developing numerous reports and recommendations on the issue at the request of the EEAA Protectorates Office. **In 1999 the PMG support was primarily policy-related, and in providing an experienced diver for two week-long safaris and numerous day-dives.**

Declaration of the Red Sea Marine Park. At the request of the EEAA, the PMG prepared supporting documents for the justification and declaration of the Red Sea Marine Park. In September 1999, the Minister of Environment announced that the declaration of this park is a priority of her agency. As a major step toward declaring and operating a larger Red Sea Marine Park, the PMG presented the concept of zoning as a management tool to the local stakeholders. A two-phase zoning workshop was held in Hurghada to educate participants in the use of zoning, and to draft a preliminary zoning plan. These results were presented informally to various ministerial offices for discussions, resulting in a request for a second workshop, at the ministerial (or sub-ministerial) level to discuss these positive results for further action. A sub-set of the results (a short overview paper and figures) was prepared for EEAA's presentation in Hurghada as part of their participation in the Governor's July 4th, 1999 Symposium on Environmental Management in the Red Sea. The follow-up workshop on zoning or resource allocation will likely be a priority under the new EPPP workplan.

Impact/Results:

Ranger operations on the Red Sea coast have shown significant improvements. The rangers are now greater in number, better equipped, better trained, and carrying out more monitoring patrols than in the past. HEPCA is a more effective non-governmental organization for promoting environmental protection than in the past. EEAA's mooring program is the largest system operated under a single management system in the world. The Coral Reef Index has shown positive results: most sites in Hurghada and Safaga indicated a slight increase or no-net-loss of the area covered by hard or soft corals between 1996 and 1998. Finally, the policy dialogue on declaration of a Red Sea marine park has advanced significantly. The documentation for justification and declaration of the Red Sea Marine Park has been prepared, and the Minister of Environment has announced that the park is a priority of her agency.

Challenges and Lessons Learned:

The requirements to maintain a good Red Sea marine park operation include paying close attention to rapidly changing field conditions and events (such as boat groundings, etc.) and a rapid decision-making process to adapt the operation to handle these events. The Marine Park Advisor needs to be a full-time position in order to manage this situation. Also, there needs to be a middle or senior staffer of the EEAA Protectorates on-site. Without having the PMG staff in the chain-of-command or in daily structured meetings with the EEAA or HEPCA decision-makers, it was very difficult for the groups to coordinate effectively: information was shared erratically and decision-making was not fully informed. There is a real need for a senior EEAA staffer with the continuity and authority to direct and enforce day-to-day operations and discipline, to work with the USAID technical advisors, and to maintain a solid record of

activities from that program. For HEPCA, there is a need for decentralization of tasks and more effort to maintain and build a middle-level professional team.

2.2.2 Activity 5- Environmentally Sustainable Tourism – TDA

Description:

The TDA's environmentally sustainable tourism activities originated in 1996 with USAID's Environmentally Sustainable Tourism (EST) Project. The Ministry of Tourism/Tourism Development Authority (TDA) considers promoting environmentally sustainable tourism development along the Red Sea coast a priority. The EEPP reflects this in one of the objectives (See Objective 14). The PMG identified environmentally sustainable tourism as an activity in its original Work Plan (3/31/98) for the interim technical assistance activities.

Activities:

The PMG printed the Best Practices manual prepared under the EST project. In discussion with TDA a series of seminars were designed which would establish a rolling program that would introduce investors to individual practices and expose them to companies manufacturing equipment or providing services relevant to the practice under discussion.

A manual on Eco-Lodge development in Egypt has been published in English and Arabic. This manual describes the opportunities for Eco-Lodge development and describes the criteria that must be met before TDA will grant an investor a license to construct and operate an Eco-Lodge.

A Policy Implementation Unit (PIU) was established by decree in June 1998. The PIU serves as a channel through which information can be coordinated within the TDA and through which planning and policy decisions can be reached. In December 1998, Dr. Beryl York, an organizational development specialist, began work with TDA on organizational development issues for the Policy Implementation Unit (PIU) in order to provide it with a background report to be used for developing and strengthening its links and working relationships within the TDA.

Impact/Results:

The TDA now has a set of practices through which its commitment to environmentally sustainable tourism can be developed and a manual on Eco-Lodge development which will contribute to diversifying tourism in Egypt and promoting a more environmentally aware style of tourism.

Challenges and Lessons Learned:

The challenge of seeing policy put into practice remains an outstanding issue given the rapid pace of tourism development in Egypt.

Annex A
Project Deliverables List

Annex A

Project Deliverables List

(Home Office has this.)

Annex B
List of Consultants and Activities

Annex B

List of Consultant and Activities

Activity	Consultants	Activity
Environmental Protection Fund	Dr. Glen Anderson	EPF vision statement, strategy, revenue enhancement strategy; operating procedures
Municipal Solid Waste Management	Dr. Shaker Helmi Dr. Salah Hassouna	<i>Full Cost Accounting of Solid Waste Management in Alexandria</i>
	Mr. James Dohrman Dr. Douglas Krieger	<i>Economic Analysis of Municipal Solid Waste Service Options in Alexandria</i>
	Mr. Leo Larochelle Mr. Charles Peterson	<i>Municipal Solid Waste Management Implementation Plan</i>
	Institute for Public-Private Partnership	Public-private partnerships workshops
10 th of Ramadan EMS	None	
EST – EEAA	Mr. Bill Harrigan	Zoning for the Red Sea Marine Park
EST – EEAA	Mr. John Halas	Mooring Buoy Workshop
EST- EEAA	Mr Chris Damon	GIS in support of zoning for the Red Sea Marine Park
EST- TDA	Dr. Beryl York	Organizational development for the PIU