

Proposal for Review

Project Title: Egypt: Enabling Activity (Building Capacity for GHG Inventory and Action Plans in Response to UNFCCC Communications Obligations)

GEF Focal Area: Climate Change

Country Eligibility: Convention Ratified December 5, 1994

Total Project Costs: \$ 0.615 million

GEF Financing: \$ 0.5 million

Country contribution: \$ 115,000 (In Kind)

Implementing Agency: UNDP

Executing Agency: Government of Egypt

Tentative Approval Date: June 1995

Project Duration: Two years

GEF Preparation Costs: \$5000

EGYPT: ENABLING ACTIVITY
(BUILDING CAPACITY FOR GHG INVENTORY AND ACTION PLANS IN RESPONSE
TO UNFCCC COMMUNICATIONS OBLIGATIONS)

COUNTRY AND SECTOR BACKGROUND

1. At the national level there is a growing recognition that economic development, and the health and welfare of its population are closely linked to the proper management of its natural resources and environment. Accordingly, in early 1991, the Government of the Arab Republic of Egypt (GOE) decided to prepare an Environmental Action Plan to strengthen the management of environmental affairs. A detailed action plan was ready by May 1992. It focuses on actions for more efficient use of natural resources, particularly land and water, and to stop the degradation of its heritage and the urban environment. However the plan does not focus on regional and global environmental issues--especially climate change and bio-diversity--as it predates these international agreements. The central focus for environmental management and protection in the country is represented by the Egyptian Environment Affairs Agency (EEAA). After the enactment of Environment Protection Law beginning of 1994, EEAA has become a statutory body. It will therefore fulfil policy and executive functions in consultation with other Ministries, Agencies, private sector and NGOs and thus have overall responsibility for environment and natural resources protection.

2. The EEAA's policy and coordinating role remains paramount. It has acquired knowledge and expertise in the area of climate change through its association with various studies. Its institutional capabilities need strengthening to provide the vital link between long-term climate issues and environmental and resource management in order to take full advantage of opportunities created by national response to the UNFCCC. Thus, Egypt's operational environment strategy revolves around short and medium-term environmental issues of national interest, pollution and environmental problems which are confined to country's boundaries, and long-term environmental issues like climate change are being studied with external assistance.

Related Ongoing Activities

3. Egypt has been actively involved in the activities of the Intergovernmental Panel on Climate Change (IPCC); and took part in preparing IPCC/Working Group 3 report on Response Strategies. In 1993, Egypt prepared a UNEP funded Greenhouse Gas Costing Study, funded by Finland and coordinated by UNEP Collaborating Centre on Energy and Environment. This has been followed by an ongoing study under the "Cooperative Agreement between Egypt and USA addressing climate change issues" and forms a part of the US Country Studies Program.

4. The results obtained in the UNEP study were based on the sectorial analysis, or what sometimes is called the bottom-up approach. The impact of the energy conservation actions/measures, which were responsible for cutting CO₂ emissions by about 40%, on the welfare and GDP of Egypt was studied in a top-down model and found positive. Energy conservation measures and the associated reduction in CO₂ had positive impact on the welfare, investment and GDP of Egypt. It can thus be concluded that considerable emissions of GHGs in Egypt could be cut

emissions, and of their removals by sinks, would be periodically updated following accepted international methodologies, such as those of the IPCC. Cost-effective policy options for mitigation or adaptation strategies would be developed. Enhanced national capability would be created in the areas of climate change assessment, mitigation, and project development through programmes that strengthen existing institutions. Finally, a number of project proposals to fully exploit climate change mitigation opportunities in Egypt would be developed and presented for financing to public and private sector organizations in industrialized countries under the joint implementation provisions of the UNFCCC.

Specific Objectives

9. Three immediate objectives have been identified:

- (a) To improve capacity in the host country to comply with the requirements of the UNFCCC;
- (b) To contribute to the emergence of Egyptian national approaches and responses to the UNFCCC thereby institutionalizing the communications obligations under the UNFCCC;

PROJECT DESCRIPTION

Location and Extent

10. The Gross Domestic product (GDP) of Egypt in 1990 (the average of the two fiscal years 89/90 and 90/91) was about 49.2 billion Egyptian Pounds - L.E. (US\$ 14.78 billion) at 1986/87 price level and 92.3 billion L.E. (US\$ 27.72 billion) at 1990 price level. The share of different sectors in total GDP was as follows: industrial sector- 17.9%, agriculture- 19.65%, petroleum- 3.7%, construction- 4.95%, electricity- 1.3%, transport, communications, trade and finance- 34.2%, and general services including housing, social insurance, government and public services- 18.25%.

11. The main energy sources of Egypt are hydro power, oil, natural gas, coal and non-commercial fuels such as firewood, agricultural wastes and dried dung. The total commercial energy demand increased from about 130 PJ (3 Mtoe) in 1950 to about 677 PJ (16 Mtoe) in 1980/81 and to 1069 PJ (25 Mtoe) in 1989/90 with an average annual growth rate of 6.3% in the eighties. The pattern of energy consumption by source in 1990 was 52% from oil, 22% from natural gas, 15% from agricultural waste, 8% from hydropower, 3% from coal and less than 1% from firewood. Hydro power played a significant role in satisfying Egypt's energy needs in the seventies by providing more than two third of the electricity demand. In the late eighties the situation was completely reversed with oil and gas providing more than two third of the electricity demand. In 1990 the electric power sector accounted for about one third of the total oil and gas consumption- the current fuel mix of thermal electricity generation consists of 51% fuel oil and 49% of natural gas. In short petroleum fuels, i. e. oil and natural gas, are the main energy sources for Egypt at present and will remain for many years to come. They also represent the main current source of greenhouse gases (GHG).

down at a net "negative" cost if measures and technologies considered in this study are applied. These include: energy conservation and efficiency improvements in all sectors, particularly industry, fuel switch to cleaner sources, use of renewables, material replacement in construction industry and enlargement of the green area.

5. The US Study has two objectives: (a) to identify gaps in the UNEP study and areas to be further refined; and (b) to establish the GHG emissions inventory for Egypt's energy supply/demand system and project these emissions according to various energy and economic development scenarios. A set of alternative strategies to reduce emissions would also be investigated. Thus the energy sector receives good coverage under the US Country Studies programme.

PROJECT OBJECTIVES

Global Environmental Objective

6. The direct objective of this project is to reduce the rate of growth of greenhouse gas (GHG) emissions in Egypt. The UNFCCC provides a clear mandate for many of the activities planned in the project. For the developing countries, the most relevant obligation is in Article 12 to prepare their national communications (due three years after entry into force of the Convention), which will need a considerable degree of preparatory activities in every country. These "communications" can include climate change projects for potential financing. Article 4.1 calls on all countries to formulate and implement programmes to mitigate and adapt to climate change. Article 4.8 draws special attention to the particular needs of countries liable to drought, desertification and natural disasters. The scope of activities of this project are, therefore, linked to the objectives of the UNFCCC.

Global Environmental Benefit

7. The proposed project has significant global environmental benefit in that it targets the identification, formulation and implementation of GHG emission reduction strategies which will ultimately lead to lowering of the rate of accumulation in the atmosphere of the primary GHGs: carbon dioxide; methane; and nitrogen oxides. Given that Egypt has one of the highest growth rate of energy based GHG emissions, the proposed project provides the opportunity to address this factor in a manner that is both beneficial for the global environment and the long-term economic development of the region. Finally, through the lessons learnt in this project, the potential for transfer to other regions of the globe also holds out the prospect for further global environmental benefits.

Overall Objective

8. The project will develop an institutional mechanism to coordinate the activities that are necessary to develop policy options related to climate change and to comply with the provisions of the UNFCCC. A climate change policy dialogue process, among governmental, NGO, academic, business, and grassroots sectors, would be reinforced, which in turn will foster understanding of climate change issues and linkages with sustainable development strategy. An inventory of GHG

Strategy

12. The project represents an approach to the building of institutional and technical capacities within the country that is adapted to the particular political perspective and technical skills of Egypt, and related to implementation of the FCCC and fulfill inventory and communications obligations. Approaches that will be employed include:

- **Training of experts** who will acquire expertise to enable them to be self-dependent and capable of assembling, interpreting, and disseminating data relevant to GHG emissions and mitigation of climate change impacts.
- **Sponsoring national and cooperative training seminars, workshops, and studies** on topics such as GHG data collection and inventory, prospective impacts of climate change, climate change adaptation opportunities, substitution of more efficient commercial fuels for non-sustainable biomass exploitation, forest and biomass resource management, and renewable energy technologies. These topics contribute to climate change mitigation, but suffer from a lack of understanding in the country regarding technical options, cost-effectiveness, and how to pursue policy development in these sectors.
- **Establishing close links with parallel ongoing efforts**, including subregional UNDP/GEF projects such as building capacity in Maghreb and Sub-saharan Africa; benefiting from the joint training programme of the Climate Change Secretariat and UNITAR-CC:Train; and following the guidelines and criteria for projects with "enabling activities" for the Convention that are being developed by the CC:COPE consultative process.

Institutional Mechanism

13. The Government of Egypt will be the executing agency. This arrangement will also allow the project to access the governmental network. The project will be executed and implemented using four key national institutional actors, as follows:

- **Project Steering Committee (PSC):** The PSC, chaired by EEAA, will be charged with overseeing and advising project execution and will have decision-making powers over all aspects of the project. The PSC will include the Government representatives from key Ministries like planning, economy, energy etc., a UNDP/GEF representative, at least three NGO representatives and the Project Coordinator, who will also act as member-secretary to the Committee.
- **Project Coordinator (PC):** The PC will be selected based on technical expertise and knowledge of the national policies. The primary aim of the PC office is to coordinate project execution among different wings of government and NGOs.

- **Technical Working Group (TWG):** A TWG composed of technical experts from key relevant sectors including government agencies, academic institutions, non-governmental organizations and representatives of the private sector will be formed. The TWG will enable project management to stay in touch with relevant constituencies, and will be a technical advisory body to the PC.
- **Project Advisory Network (PAN):** The PAN will be composed of international institutions that are involved in climate-related work. The PAN will not be physically convened; communications will be through direct contacts among the PC and members of the PAN. Most organizations proposed to be included in PAN are also taking part in the CC:COPE consultative process.

Outputs and Activities

14. Described below are the expected outputs associated with each immediate objective of the project and activities leading to those outputs.

Immediate Objective 1: Improve capacity in the country to comply with FCCC communications obligations and inventory requirements

Output 1- A Two-Tiered Institutional Structure to Address Climate Change Issues: This will consist of the policy-making PSC and a permanent technical secretariat in EEAA would be created or strengthened that is able to coordinate the activities that are necessary to develop policy options related to climate change and to comply with the provisions of the UNFCCC. The following activities are planned:

- Identify needs of the National Institution: Identify the needs of the EEAA with respect to the desired level of understanding of climate change issues.
- Project Initiation workshop: The PC will bring together the teams involved in UNEP and US studies and 4-5 in-country specialists interested in climate research as well as other selected external experts for a five day workshop. The workshop will finalize the work plans and necessary adjustments in the activities and the budgets will be made, as appropriate.
- Building on CC:TRAIN, the US and UNEP Country Studies, collate a training package to provide organizations that are likely to participate in climate work with a common understanding regarding climate change, the Convention, science, economics, academic research agendas, energy and land use, greenhouse gas inventory procedures, proposal writing, global activities, and funding agencies.
- Conduct training of country implementing institutions: Conduct training activities as needed for the participating organizations to establish a common level of understanding.
- Through training and capacity building, enable a more effective national participation in international and regional climate change meetings.
- End-Project National Workshop: Hold a national workshop at end of project to update training package materials as jump-off for post-project activities and to assess

past training efforts in the institutions that would have participated in the project activities.

Output 2- Technical Working Group (TWG) to Bring Together Different Constituencies:

The development of policy options in a country will require inputs from many different sectors. Establishment of the TWG will provide an institutional mechanism through which these inputs can be gathered and project's management could remain in touch with non-governmental bodies and NGOs. To obtain this output, activities given below will be undertaken:

- **Constitute the Technical Working Group:** Based on the previous assessment of national capabilities and responsibilities, identify national TWG members, including all relevant stakeholders, such as Government agencies, NGOs, academic institutions, and the private sector.
- **Country Training Courses:** Conduct training courses as needed to establish a common level of project background, with a minimum of one course based on the training package developed.
- **Meetings of TWG:** At least quarterly meetings of the working group to consider progress, define and undertake the necessary policy research programme, and generally guide project activities.

Output 3 -Standardized Inventories of Greenhouse Gas Sources and Their Removals by Sinks: The availability of inventories will form the scientific basis for policy analysis at the national level. Earlier inventories were prepared under UNEP project and are being reviewed in US study using IPCC methodology. The project activities will continue to use the IPCC methodology for national policy development and comparison with other countries' inventories. Planned activities are:

- **Evaluation of Country Inventories:** The core group at EEAA coordinates the evaluation of the existing inventories at national level and identifies gaps based on the IPCC/OECD methodology.
- **National Inventory Workshops:** National training workshops for individuals and groups to be involved in the inventories in the country.
- **Completion of Country Inventories:** EEAA manages the completion of country inventories, using the IPCC/OECD methodology, including listing areas where this methodology needs adjustments.
- **Dissemination of Inventory Report:** Finalization and dissemination of national inventory report, including communications of the analyses to the IPCC/OECD.
- **Regular updating of inventory in fulfillment of Egypt's communications obligations under the Convention.**

Output 4 - Country Reports on Assessment of Policy Opportunities and Priority Areas for Intervention: Policy and technical proposals for climate change adaptation and mitigation generated through a variety of sources will be assessed in order to develop country reports intended to help guide national and sub-national policy development. Project activities proposed are:

- Review of Country Climate Change Policies: Identify and document existing policies and policy analyses relevant to climate change in Egypt, including energy and land-use policies.
- Scenario Development: Modelling of national scenarios, including projected future levels of GHG emissions and removals by sinks, as well as potential climate change impacts.
- Country Policy Dialogues: EEAA and TWG, based on the policy review undertaken earlier, initiate policy dialogues to reformulate environment and development goals in light of climate change considerations, and to establish priorities for policy analysis leading to preliminary national recommendations.
- National Policy Analyses: EEAA and other implementing agencies coordinate policy analysis to develop and assess policy options and institutionalize information collection and policy assessments, bringing in relevant experience from region and elsewhere. Multiple meetings and workshops refine the analysis.
- National Policy Workshop: Final policy workshop to develop proposed national strategies.

Immediate Objective 2: To contribute to the emergence of Egyptian national approaches and responses to the FCCC

Output 1 - A Strengthened National Mechanism in EEAA That Can Provide Full Support for Climate Change Related Activities: The Government of Egypt and local institutions will be able to use the capacity created through the Office of Project Coordinator in the EEAA to help them develop national priorities in the area of climate change and channel these into relevant regional and global processes, such as the UNFCCC or the IPCC. Activities envisaged are:

- Identify PC: Select a qualified professional to coordinate project activities at the national level.
- Implement Activities of Project: The Project Coordinator, assisted by a core group in EEAA will implement all relevant project activities, including development of the overall work plan and its funding and human resource requirements.

Output 2 - A Report on the Assessment of Past, Ongoing, and Proposed Climate Change Initiatives and Impact Studies in Egypt: A comprehensive review of other activities and actors in Egypt and North Africa/West Asia in the area of climate change will be important for the project. The PC will remain in contact with counterparts for Maghreb and Africa projects. Activities to be undertaken are:

- Identify and collect published and unpublished literature on climate change initiatives, policies, and impacts;
- Document the status of externally funded research and other climate change activities;
- Identify and document expertise and consultants in Egypt and North Africa climate change issues. This review is to be done at the very beginning as a draft for use by the project, and finalized at the end of the project.

Training Programme

15. Training activities are a significant component of this project at all levels, and will take full advantage of ongoing GEF/UNDP, US and UNEP Country Studies, other bilateral initiatives and initiatives such as sub-regional projects for Maghreb and Sub-Sahara, and CC:Train, CC:COPE. Training will be composed of:

Technical Expert and Consultancy Training: Extensive reliance on technical experts will be required during the project to conduct studies and analyses, and to train national governmental and non-governmental organizations in a wide variety of subjects related to the substance and process of climate change and its mitigation.

Orientation: The PC will undergo an in-depth orientation tour after being selected for the position in order to supplement technical expertise and knowledge of ongoing climate change and mitigation activities in North Africa, Europe and the US, including preliminary joint implementation efforts. It will include meetings with governmental, NGO, academic and research organizations. The orientation is expected to be approximately one month in duration. During the course of the project, individual project representatives, belonging to PSC and TWG, will participate in short-duration orientation.

In-Service Training: This will include participation of governmental and NGO representatives in national as well as international workshops and seminars to be organized by the PC with national and international expert support. Topics for this training will be selected by these Coordinators, and are likely to include climate change, the UNFCCC and related national and international policies, GHG mitigation options based on Egyptian energy and forestry circumstances, developing GHG emissions inventories and scenarios, climate change mitigation economics, and proposal writing and project development.

Expected end of project situation

16. On completion of this project, Egypt will have a considerably improved capacity through which to respond to the challenges and opportunities presented by its ratification of the United Nations Framework Convention on Climate Change. End of project outcomes will include:

A two-tiered institutional mechanism consisting of a policy-making Inter-Ministerial Committee and a permanent technical secretariat in EEAA would be created or strengthened that is able to coordinate the activities that are necessary to develop policy options related to climate change and to comply with the provisions of the UNFCCC;

A climate change policy dialogue process, among governmental non-governmental, academic, business, and grassroots sectors, would be created or strengthened, intended to foster understanding of climate change issues and linkages with sustainable development strategy;

An inventory of GHG emissions and their removal by sinks, would be periodically updated following accepted international methodologies, such as those of the IPCC. In cases where more detailed work is required on these inventories, appropriate project proposals will be prepared;

Cost-effective policy options for mitigation or adaptation strategies would be developed. In cases where more detailed work is required on policies, appropriate project proposals will be prepared;

Enhanced national capability would be created in the areas of climate change assessment, mitigation, and project development through programmes that strengthen existing institutions.

Project reviews, reporting and evaluation

17. The project has a distinct component for internal monitoring and evaluation (M&E) that is specifically designed to learn from the experiences of the project and to improve the process of inter-institutional transfer of knowledge and experience. External monitoring and evaluation procedures will be established in accordance with GEF and UNDP practices. In addition, the proposed Project Steering Committee (PSC) which will maintain close project oversight will also conduct periodic technical and programmatic reviews. Quarterly Project Progress Report will be prepared and sent to PSC members to be evaluated during the regular meetings of the PSC.

RATIONALE FOR GEF FINANCING

18. The proposed project will help accelerate the adoption of GHG emission reduction strategies in the country. This will be accomplished primarily through establishment of a two-tiered institutional mechanism at the national level, cooperation between government and private sector, sharing of information, demonstration projects, institutional capacity building and training of indigenous experts. The direct benefit will be in the reduction of GHG emissions from Egypt. The indirect benefits will be the establishment of a long-term capability to alter the development course of the nation so as to include minimizing of GHG emissions as one of the criteria factored into the decision making process.

19. From the local perspective, the common objective of increasing the economic and ecological efficiency of energy and natural resources use in Egypt provides a very convincing justification for the pursuit of the activities outlined in the Egypt's National Environmental Action Plan. Dramatic but predictable increases in future energy use in the country will make it more difficult to control global GHG emissions; additionally such resources will drain resources available to Egypt for other pressing priorities. As most of the project activities could form part of the Environmental Action Plan if long-term planning perspective is adopted, the project will demonstrate that climate change mitigation trajectory moves along the sustainable development path.

SUSTAINABILITY AND PARTICIPATION

20. The project's emphasis on training, capacity building and institutional development coupled with the establishment of an active national network will ensure sustainability of project objectives beyond the term of GEF support. In addition, the project's emphasis on GHG emission reduction strategies that are essentially cost-effective with long-term economic benefits will help stimulate

national long-term support for the services and activities of the project. The project will actively promote the marketing of its services and capabilities to both the public and private sectors of the region. The project's focal point, EEAA, is also the institution holding the overall responsibility for climate change and environmental matters in Egypt.

LESSONS LEARNT AND TECHNICAL REVIEWS

21. In the course of technical reviews of enabling projects, the importance of cooperation and networking of a broad-range of experts has been noted and duly reflected in the present proposal. This project recognizes the importance of exchange of information and experience at the national level, as well as regionally and internationally. It is proposed that this project will work in tandem with similar enabling activities to be undertaken in the Arab States region, such as the UNDP Jordan proposal (approved by the first Council Meeting) and the Sudan proposal (cleared by the GEFOP and submitted to the second Council Meeting), and will establish linkages with the GEF Maghreb Regional GHG Emissions Reduction project.

22. This proposal was submitted for independent technical review to a STAP expert. The technical comments of the reviewer, which support this proposal, are attached. Based on GEFOP recommendations for similar projects in Malaysia and Sudan, a component dealing with project preparation has been deleted as it is considered more appropriate to fund this through the PDF mechanism at a later point.

PROJECT FINANCING AND BUDGET

23. The total costs of the project amount to \$615,000. It is proposed that the GEF will make a contribution of \$500,000 towards this project. This amount will be supplemented by the local currently in-kind contribution of the Egyptian Government equivalent to \$105,000.

Budget Category	National Inputs in kind (US\$)	UNDP Inputs (US\$)
Personnel	60,000	227,000
Travel	10,000	85,000
Training	15,000	400,000
Office Space	10,000	-
Office Equipment	10,000	30,000
Miscellaneous services	10,000	20,000
Total	115,000	500,000

INCREMENTAL COSTS

24. Preparations of national communications by developing countries is not subject to incremental cost calculation requirements under the provisions of the UNFCCC.

25. The project is consistent with the enabling activity and capacity building objectives listed in INC Document (A/AC.237/90/Add.3), prepared jointly by the interim secretariat of the UNFCCC and the GEF Secretariat in order to facilitate coordinated and timely assistance to countries for the implementation of the Convention. This project responds to such objectives by implementing an activity needed to enable the Government of Egypt to fulfil its commitment under the Convention. This goal will be accomplished primarily through in-country coordination, sharing of information, institutional capacity building, and training of local experts. Direct benefits will be economic and environmental benefits associated with more efficient use of energy and other natural resources, as well as the promotion of a development course in the country that accounts for the goal of minimizing GHG emissions in the decision-making process.

26. The project seeks to establish links with other projects being carried out by other GEF implementing agencies or by other multilateral and bilateral organizations. It will do so practically, as mentioned earlier, by establishing close links with parallel ongoing subregional UNDP/GEF projects such as building capacity in Maghreb and Sub-Saharan Africa; benefiting from the joint training programme of the Climate Change Secretariat and UNITAR, CC:TRAIN; and following the guidelines and criteria for "enabling" projects that are being developed by the CC:COPE consultative process, as well as guidance issued by the INC at its 11th session and by the COP in Berlin in March 1995. The results and outputs of this project will be shared among all actors involved in climate change activities in order to enable such actors to mutually benefit for the present and for the future.

ISSUES, ACTIONS, AND RISKS

27. The project methodology involves close cooperation between governmental and non-governmental organizations in carrying out project activities. There is a risk that cooperation may not occur effectively. This risk will be reduced by careful attention to the problem by the PC who will work with NGOs and other private institutions through the mechanisms of the TWG to address problems.

28. While sufficient funds are available for the project itself, the last objective aims to undertake specific climate change mitigation efforts with additional public and private sector funding. If funding efforts are not successful, this part of the project will not be possible. This risk can be mitigated by establishing a clear time-table for fund-raising activities to be used by the Project Coordinator.

INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION

29. The Government will allocate a budget for the PC and an assistant's services, logistics and administrative support. The project will be located within the structures of EEAA.

30. The Government will assist in the creation of Technical Working Group to undertake national level project activities as described above. The Government will assign suitably senior and qualified representatives of relevant government agencies and organizations to the Project Steering Committee and TWG and will seek the participation of qualified academic and non-governmental organizations and individuals. Actual execution of project activities will be undertaken in coordination with EEAA, Organization for Energy Conservation and Planning (OECF), the selected national organizations and NGOs. The PC will have the responsibility for ensuring timely execution and success of the project with the assistance of the core staff of EEAA assigned to the project.

TECHNICAL REVIEW**EGYPT: ENABLING ACTIVITY
(BUILDING CAPACITY FOR GHG INVENTORY AND ACTION PLANS IN RESPONSE
TO UNFCCC COMMUNICATIONS OBLIGATIONS)****RELEVANCE AND PRIORITY**

1. Egypt is a large heavily populated country with rapidly growing greenhouse gas emissions. Egypt is also particularly vulnerable to climate change being so dependent on the water supply of the river Nile and lying so low, especially the Delta area at about one metre above sea level. So Egypt itself is a priority country for GEF climate change projects. As Egypt was one of the first countries to ratify the FCCC, there is a fair chance that the government of Egypt will support the activities as proposed in the project.
2. The scope of the project is excellent, it meets with the present demands of capacity building as to support the government in meeting the FCCC commitments. The primary focus on greenhouse gas abatement oriented capacity building is well chosen given the present growth of emissions and the scope for negative cost measures to reduce the rate of growth (as in almost all developing countries).
3. Global significance is there because Egypt is a big country with a relatively large population. Moreover Egypt is an important player in the Arab World and thus there is a good chance that other Arab countries will follow Egypt's example.

BACKGROUND AND JUSTIFICATION

4. The project is reasonably well specified, and the allocation of the money is appropriate (not too much on materials travel and equipment, the focus is on personnel cost as one would expect in a capacity building project).
5. The project builds on existing institutions in Egypt and intends to strengthen those, the Environment Agency. This strengthening is rightfully guided by an interdepartmental committee.

PROJECT OBJECTIVES

6. The project objectives are clear and sound, and they are measurable. Especially the objective of developing eight realistic GHG control projects can be evaluated, as can the quality of the national communications to be produced in the FCCC framework.

7. The risks are that the government will pull away the resources that are an essential part of this project i.e. the staff of the technical working group (worth 60.000 USD) and or the office space and office equipment.
8. Other risks are a laissez-faire attitude of the relevant ministries, vis a vis the implementation of cost effective projects.

ACTIVITIES

9. The activities can be achieved when the Egyptian government is fully committed to put sufficiently high level staff in the mentioned "Project Steering Committee", and when the project coordinator has quality and is well accepted by the Project Steering Committee and by the Environment Agency.

CRITICAL ANALYSIS OF THE SITUATION/APPROACH

10. The project is well defined and the approach is appropriate. Identification of the most promising ways to reduce the growth of GHG emissions is an important part of the project.

PROJECT SUSTAINABILITY

11. Sustainability will always be a vulnerable issue in a capacity building project as the goal of the project is to encourage activities that are not being carried out automatically due to lack of knowledge, lack of priority or lack of institutional capability/setting. Still there is a fair chance that the government of Egypt will continue the type of activities once it recognizes that the measures proposed are cost effective, and that donor countries are willing to support projects that have global benefits in terms of a reduced growth for greenhouse gas concentration in the atmosphere.
12. Sustainability is aimed for in the project through the development of a pipeline of sound projects, and through the development of an institutional structure that is linked both nationally (including NGO participation) and internationally.

INNOVATION

13. The project is a straightforward capacity building project with the right balance of national and global interests. Innovation is not always required. The selection of Egypt for this type of project is well justified.

PROJECT ALLOCATION

14. As always in this type of projects one has to decide whether to put it under the authority of the planning and economics type ministries or under the environment type ministries. Here the selection is the Environment Agency, as the primary basis for the project, with important institutionalized relations to the others. Given the importance of strengthening the usually not very powerful environment ministry this choice is good. On the other hand it may be difficult to implement the measures that will be proposed as these are usually in the domain of the other ministries. Still I believe the right choice has been made given the broadness of the issue.

DEMONSTRATION PROJECTS

15. Capacity building can act as a demonstration project, as the institutional and the technical results may well be copied by others. It would be useful if a regional role of this project could be made more explicit. In that case the cost would probably go up.

FUNDING LEVEL

16. The funds indicated in this project: 500.000 USD to be financed through GEF and 115.000 to be funded by the host country is realistic and not on the high side for the objectives stated in the project document, given the size of Egypt and the complexity of the institutions in this country.

TIME FRAME

17. The time span of the project is 2 years. This is relatively short. Personally I believe a four year period would be better, but then the cost would be some 40% higher. The project now ends with the development of eight cost effective GHG abatement projects. The challenge however, is to get at least two or three of those projects awarded. And we all know that usually takes at least one or two additional years. So I suppose the group/institution to be developed will probably call for an extension.

SUMMARY

18. The greatest strength of the project is the identification of a country that deserves support for capacity building funds under GEF/FCCC given its situation as a major player in GHG emissions growth, a major player among the Arab countries, and a country that has actively participated in the climate debate through conferences, IPCC participation and on the political podium. The project itself is a straight forward relatively low budget capacity building project with potentially a very worthwhile spin-off for the national, regional and global community.

**ANNEX A: SUMMARY OF PRIMARY ENERGY CONSUMPTION
AND GHG EMISSIONS IN EGYPT, 1990**

Energy/Emissions Sector	Energy PJ	CO ₂ Mt	CH ₄ kt	N ₂ O kt
1. Petroleum	43.50	3.1	51.906	0,121
2. Power Production	464.63 ¹	24.75	0.073	0.89000
3. Heavy Industry	144.41	18.81	0.032	0.399
4. Light Industry	138.59	9.30	0.0243	0.351
5. Household & Commerce	134.57	9.34	2.635	0.3700
6. Transport	196.6	13.46	9.934	7.091
7. Agriculture & Domestic waste	212.12 ²	0.67	424.22	33.25
8. Others ³	58.42	4.08	1.127	1.579
Total	1392.84	83.51	489.951	42.629

19. As may be seen from the Table, power production, industry and transport sectors are the major producers of CO₂ (carbon-dioxide). Rice paddies are, on the other hand the main producer of CH₄ (methane). They are responsible for over 80% of methane production in Egypt. Finally, Nitrogenous (N)-fertilizers and road transport are the main sources of nitrous oxide.

20. Lastly, it is well to remember that Egypt has relatively high GHG emissions per capita; comparable to China and Brazil. More important is the certainty that the share of fossil fuels will go up in future and consequently the emissions.

¹ Generated energy equivalent of hydropower was obtained by assuming an equivalent efficiency equals the average thermal efficiency in that year, i.e., about 33%.

² About 202.71 PJ of non-commercial energy sources are included.

³ Governmental offices, services, etc. (electricity consumption not included).

Source:

UNEP Greenhouse Gas Abatement Costing Studies - Phase Two, UNEP Collaborating Centre on Energy and Environment, Riso National Laboratory, Denmark, May 1994