GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	
GEF Project ID:	985		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:	1815	**GEF financing:**	0.83	0.83
Project Name:	Developing Renewable Ground Water Resources in Arid Lands: a Pilot Case - the Eastern Desert of Egypt	IA/EA own:		
Country:	Egypt	Government:	0.59	UA
		Other*:		UA
		Total Cofinancing	0.59	1.35
Operational Program:	9-Integrated Land and Water Multiple Focal Area Operational Program	**Total Project Cost:**	1.83	2.18
IA	UNDP	Dates		
Partners involved:	Cairo University, Ministry of Water Resources and Irrigation	Effectiveness/ Prodoc Signature (i.e. date project began)		7/30/2002
		Closing Date	Proposed: Aug 2005	UA (not yet completed)
Prepared by: Tommaso Balbo di Vinadio	Reviewed by: Neeraj Negi	Duration between effectiveness date and original closing (in months): 36	Duration between effectiveness date and actual closing (in months): UA	Difference between original and actual closing (in months): UA
Author of TE: Dr. Neno Kukuric		TE completion date: Dec 2008	TE submission date to GEF EO: UA September 2009	Difference between TE completion and submission date (in months): 9 months

2. SUMMARY OF PROJECT RATINGS AND KEY FINDINGS

Please refer to document GEF Office of Evaluation Guidelines for terminal evaluation reviews for further definitions of the ratings.

Performance Dimension	Last PIR	IA Terminal Evaluation	IA Evaluation Office evaluations or reviews	GEF EO
2.1a Project outcomes	S	HS	NA	S
2.1b Sustainability of Outcomes	**N/A**	S	NA	Unlikely
2.1c Monitoring and evaluation	UA	S	NA	UA
2.1d Quality of implementation and Execution	**NA**	**NA**	NA	MS
2.1e Quality of the evaluation report	**N/A**	**N/A**	NA	MS

2.2 Should the terminal evaluation report for this project be considered a good practice? Why?
No. Even though the report is well structured, the TE has used a terminology that is often inconsistent with that used in the PIRs and project brief. Some of its ratings are more optimistic than what the presented evidence may support. Moreover, the TE does not provide actual co-financing data.

2.3 Are there any evaluation findings that require follow-up, such as corruption, reallocation of GEF funds, mismanagement, etc.?

Such instances have been not mentioned in the terminal evaluation.

3. PROJECT OBJECTIVES

3.1 Project Objectives

a. What were the Global Environmental Objectives of the project? Were there any changes during implementation?

According to the project brief the project's objective is to prevent "further degradation of the fresh water ecosystems in arid and semi-arid areas of North Africa and the Middle East."

There was no change regarding the GEB during project implementation.

b. What were the Development Objectives of the project? Were there any changes during implementation? (describe and insert tick in appropriate box below, if yes at what level was the change approved (GEFSEC, IA or EA)?)

According to the project brief, the main objectives are the following:

(1) Develop reliable techniques for evaluating the extent of renewable ground water resources in arid lands, with the Eastern Desert of Egypt as a test site.
(2) Evaluate the source(s) of the groundwater in the alluvial aquifers of the Eastern Desert, the timing of their recharge cycle, and the extent of the renewable groundwater resources recharged by rainwater precipitating over the Red Sea Hills area in the Eastern Desert.
(3) Investigate groundwater flow in the alluvial aquifers flooring one of the main valleys of the Eastern Desert.
(4) Produce a replicable model in neighboring Middle Eastern and Saharan countries and thus contribute to the preservation of freshwater ecosystems in the area.

According to the TE, there was no change in the objectives even though one development component was added during the course of project implementation ("assessment of adverse ecological effects that could result from the exploitation of the investigated freshwater resources"). It should be noted that what the TE considers outputs are considered to be outcomes in the PIRs (i.e. according to the PIR the development component is actually an outcome and not an output).

According to TE, "the development project objective was clearly stated in the project document but not complemented with activities and the budget required for its achievement. Realizing a lacking of development activities in the project, the Mid-Term reviewers suggested drafting a development plan that should build on gained technical knowledge and include the socio-economic aspect of possible developments". It should be noted that it was the GEFSEC which pushed for incorporating a development component in that sense (correspondence of 28 September 2000)

Overall Environmental Objectives	Project Development Objectives	Project Components	Any other (specify)
		x	

c. If yes, tick applicable reasons for the change (in global environmental objectives and/or development objectives)

Original objectives not sufficiently articulated	Exogenous conditions changed, due to which a change in objectives was needed	Project was restructured because original objectives were over ambitious	Project was restructured because of lack of progress	Any other (specify)
x				

4. GEF EVALUATION OFFICE ASSESSMENT OF OUTCOMES AND SUSTAINABILITY

4.1.1 Outcomes (Relevance can receive either a satisfactory rating or a unsatisfactory rating. For effectiveness and cost efficiency a six point scale 6= HS to 1 = HU will be used)

a. Relevance **Rating: 5**

This project developed a replicable model for several neighboring countries that had similar hydrological features. The project aimed at assisting Egypt "to cope with increasing demand for freshwater supplies due to increasing populations and limited water supplies." The assessment of alternative water resources for countries in the area was expected to assist them in meeting their national goals. The project objectives and expected outcomes are consistent with the strategies outlined in the GEF Operational Program on Integrated Land and Water Management Multi Focal Area (OP9) The project objectives are also in accordance with of the 2005National Water Resources Plan (NWRP) and are

considered by the government of Egypt to be national priorities.

b. Effectiveness **Rating: 5**

According to the TE, the project achieved almost all of the expected results listed in the project document. The project produced a methodology for the development of groundwater resources in arid and semi-arid regions. Instead of assessing the achievement of every expected project outcome the TE explains in detail the methodology developed by the project which consists of seven steps or stages.

The following were the main achievements of the project.

1) Chemical and isotopic analyses for groundwater samples were generated and interpreted, report and peer-reviewed manuscript for data and results were prepared.
2) Report on compiled meteorological data and maps for precipitation was prepared
3) Geologic, satellite, digital topography data was compiled, surface Runoff- Recharge model was developed, calibrated, and verified.
4) A conceptual groundwater flow model generated and verified for the most promising valley in Eastern Desert
5) Replication of the of the project experience in neighboring countries
6) Awareness raised on ground water related issues and several publications produced.

The only expected activities that the project did not complete fully were the socio-economic activities under one of its components – adverse ecological effects that could result from the exploitation of the investigated freshwater resources are assessed. Even though two workshops for dissemination of results were conducted, a thorough Environmental Impact Assessment was not conducted (the PIR mentions that only 50% of it was achieved).

The TE argues that this project was formulated as a Targeted Research Project and the execution of the EIA (which was added during project implementation) was obviously not a priority for the researchers at the Faculty of Engineering at Cairo University. Besides, coupling of this regular project activity with an additional activity of preparing a development action plan slowed down the EIA execution. Therefore, the TE says that it was decided that the EIA is carried out by itself at the regional level as an on-going activity. The TE mentions that the EIA will be completed before the operational completion of the project.

c. Efficiency (cost-effectiveness) **Rating: 4**

According to the TE, the amount, quality of work and the results produced in this project give a strong indication of the high cost-effectiveness of the project. According to the TE, although there were several delays in completion of project activities, the main reason for project extension was the incorporation of development activities in the project by GEF SEC and the need to strengthen cooperation among partners. Efficiency is rated moderately-satisfactory.

4.1.2 Impacts: summarize the achieved intended or unintended impacts of the project.

This project is a targeted research project. Therefore, it is difficult to assess its impact at project closing.

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE. Use a four point scale (4= Likely (no or negligible risk); 3= Moderately Likely (low risk); 2= Moderately Unlikely (substantial risks) to 1= Unlikely (High risk)). The ratings should be given taking into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

a. Financial resources **Rating: 1**

According to the TE, no financial and economics instruments have been established specifically for this project to ensure the on-going flow of benefits once the GEF assistance ends. Even though there were some encouraging government statements with respect to the beneficial use of project results, the financial risk is considered to be high.

b. Socio political **Rating: 3**

The continuation of project activities is dependent on the cooperation between Ministry of Water Resources and Irrigation, and the Faculty of Engineering at Cairo University. Based on the information provided in the terminal evaluation, it may be inferred that these institutions have managed to find a new working arrangements.

Although the main activities of the project were technical in nature, development of techniques for the assessment of alternative water resources in arid areas of Egypt and elsewhere will in the long-run produce benefits to the local population, especially the farming communities. It is unlikely that the project faces socio-political risks. .

c. Institutional framework and governance **Rating: 3**

According to TE, the project benefits are likely to continue after the project completion because the project results are now being used routinely by two main institutions engaged in the assessment and development of groundwater resources in Egypt: the Ministry of Water Resources and Irrigation, which is primarily responsible for the development of Egypt's water resources, and the Faculty of Engineering at Cairo University, which is largely responsible for

advancing the research in this area. However, lack of a specific budget for the continuation of those tasks poses a risk.
d. Environmental **Rating: UA**
Unable to Assess

4.3 Catalytic role

a.. Production of a public good The project developed an integrated technique for assessing the extent of renewable ground water resources in arid lands
b.. Demonstration The project developed a replicable integrated technique for evaluating the extent of renewable ground water resources in arid lands, with the Eastern Desert of Egypt as the test site. As part of this process, the project developed appropriate facilities and expertise at Cairo University to enable replication of the methodologies elsewhere in Egypt and in neighboring countries. Moreover, UNDP identified several more representatives from neighboring Middle Eastern countries and from the members of the Nile initiative project to join the steering committee and to be invited to all of its meetings. The project has been promoted abroad at various occasions (i.e. Arab Water Regional Conferences in 2004 and 2006 organised by CEDARE) for a possible replication of the developed methodology.
c.. Replication According to PIR08 several entities in Oman, Saudi Arabia, Kuwait, and others are following the methodology and techniques developed by the project. However, as TE points out, the replication of the EDP methodology elsewhere depends on several factors such as the availability of data and cost considerations given that field investigations including monitoring and well development are generally costly. Moreover, the methodology was developed specifically for Eastern Desert and when replicated it should be tailored accordingly.
d.. Scaling up In the future the project findings might be incorporated in the currently revised National Water Resources Plan (proposed recommendation)

4.4 Assessment of processes and factors affecting attainment of project outcomes and sustainability.

a. Co-financing. To what extent was the reported cofinancing (or proposed cofinancing) essential to achievement of GEF objectives? Were components supported by cofinancing well integrated into the project? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?
According to the TE, the in-kind contributions from NWRC and Cairo University were initially $0.59M. The Ministry of Agriculture and Land Reclamation (MALR) contributed an additional $0.30M, Ministry of Water Resources and Irrigation (MWRI) $0.40M and the US Egypt Join Research Programme $0.06M so that the overall actual co-financing was $ 1.35 M. Yet, the TE does not provide data on co-financing actual. It states that using UNDP Combined Delivery Reports (2003-2007), both GEF and governmental disbursement by activity can be followed, but only to a certain extent. A sizable portion of cofinancing was in form of in kind government contributions that generally very difficult to track. Furthermore, the TE does not give much information as to whether the co-financing was essential to the project and what specific activities were covered.
b. Delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?
The project took much longer than expected to finish. Although there were several delays in completion of some of the project activities, according to the TE instead of these delays the main reason for project extension was incorporation of development activities in the project by GEF SEC and the need to strengthen cooperation between partners. It should be noted that the socio-economic activities were yet to be completed at the time TE was prepared. Therefore, the information on actual delay in operational closing of the project is not available.
c. Country Ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability highlighting the causal links.
According to the TE, most of the stakeholders are governmental departments, institutes and institutions, confirming a strong country-ownership of the project. The governmental representatives were involved in the project proposals from the beginning, showing continuous commitment to the project idea.

4.5 Assessment of the project's monitoring and evaluation system based on the information in the TE

a. M&E design at Entry Rating (six point scale): MU
The project document includes a section on M&E plan with all the reports that should be submitted periodically and a specific budget for evaluation purposes. However, the project document does not include a logframe.
b. M&E plan Implementation Rating (six point scale): UA
The TE does not provide sufficient information to assess the quality of the M&E implementation. According to the TE, the progress of Eastern Desert Project has been monitored and evaluated by UNDP on a regular basis. The TE adds that the feedback from the project evaluation is used by the project manager to adjust, or rather extend project activities but it only refers to the addition of a component after the MTE in 2006. As part of the M&E process, several documents were produced and submitted on a regular basis (Project Annual Plans, Quarterly and Annual Project Reports).
b.1 Was sufficient funding provided for M&E in the budget included in the project document? UA
b.2a Was sufficient and timely funding provided for M&E during project implementation? UA
b.2b To what extent did the project monitoring system provided real time feed back? Was the information that was provided used effectively? What factors affected the use of information provided by the project monitoring system? UA The TE states that UNDP used an adaptive management approach. UNDP identified implementation problems through the monitoring system and took corrective actions. However, the TE does not provide specific examples
b.3 Can the project M&E system (or an aspect of the project M&E system) be considered a good practice? If so, explain why. UA. Even though there is a section on M&E the information is not sufficient to allow an assessment of whether the project M&E system is a good practice

4.6 Assessment of Quality of Implementation and Execution

a. Overall Quality of Implementation and Execution (on a six point scale): 4
b. Overall Quality of Implementation – for IA (on a six point scale): 3
Briefly describe and assess performance on issues such as quality of the project design, focus on results, adequacy of supervision inputs and processes, quality of risk management, candor and realism in supervision reporting, and suitability of the chosen executing agencies for project execution. This project was initially developed as a technical project and only during implementation non-technical activities were added to it. This resulted in delays as the addition of activities involved extensive coordination, consultation and negotiations among various partners. Another project design shortcoming that led to delays was the lack of planning on roles and responsibilities of partners. The TE states that the selection of a project manager from Cairo University was a logical choice but it also adds that if the realization of the project development objective was elaborated through a set of (budgeted) activities, vesting the project manager's position in a government department or institute might have been more appropriate Candor and realism in reporting are considered satisfactory.
c. Quality of Execution – for Executing Agencies[1] (rating on a 6 point scale) 5
Briefly describe and assess performance on issues such as focus on results, adequacy of management inputs and processes, quality of risk management, and candor and realism in reporting by the executive agency. The quality of execution can be considered to be satisfactory. The main project partners – Cairo University and MWRI – were able to overcome initial coordination related problems and were able to establish an effective working relationship among themselves.

5. LESSONS AND RECOMMENDATIONS

Assess the project lessons and recommendations as described in the TE

a. Briefly describe the key lessons, good practice or approaches mentioned in the terminal evaluation report that

[1] Executing Agencies for this section would mean those agencies that are executing the project in the field. For any given project this will exclude Executing Agencies that are implementing the project under expanded opportunities – for projects approved under the expanded opportunities procedure the respective executing agency will be treated as an implementing agency.

could have application for other GEF projects

The main lessons listed in the TE are the following:

- Continuity in terms of time in a project should be secured as much as possible during both its formulation and its implementation. Within these phases, continuity of people involved should also be secured. Institutional framework ought to be capable of providing continuity between the project development and project implementation phase.

- In complex projects, where various organizations and disciplines join to achieve common goals, the agreement on the roles, responsibilities and ownership of the future partners need to be included in a project document.

- Management of the project through a task-based, deliverable-oriented grant distribution, as implemented in the EDP, appears to be far more efficient than the lump-sum payment procedure. Also for that reason, the project tasks need to be clearly detailed in the Inception Report.

- Feasibility of possible additional (unplanned and unbudgeted) project activities should be carefully examined.

- Non-technical activities required to contribute to the achievement of a long-term development objective also need to be specified and budgeted in the project document.

- The Eastern Desert Project makes a unique example of the development of the equal project partnership between Cairo University and the governmental departments/institutes. This precedent should be appreciated and further developed in practice.

b. Briefly describe the recommendations given in the terminal evaluation

The recommended actions necessary for the project completion are the following:

- Environmental Impact Assessment needs to be completed.

- The final project report should include a summary of baseline conditions at the beginning of the project execution (2002).

- A brochure (4-8 pages) about the Methodology for Developing Groundwater Resources in Arid Lands should be produced and distributed to relevant organisations (ministries, research institutes, universities, NGOs) in countries where this methodology has replication potential.

The recommendations about the developed methodology and about further implementation of the developed methodology are the following:

- Additional field investigations in Eastern Desert, for the purpose of local assessment, should be planned and executed. In the next project phase, about 20-30 wells should be drilled and constructed in all major types of potential groundwater reservoirs.

- The developed methodology should be applied in the Sinai Peninsula in synergy with the on-going assessment of groundwater potential in that region. Moreover, further contacts should be made with neighbouring countries to ensure extrapolation of the EDP results to the region .

- The web-based information system developed in this project should be regularly updated and extended to receive data from other regions in Egypt. The technical part of this task is the responsibility of the Information and Decision Support Department of the MWRI. However, the content of the updates is common responsibility of the Groundwater Department at MWRI, NWRC and Cairo University.

- Realization of a development action plan for Eastern Desert needs to be continued with the revival of the inter-ministerial committee and the coordination of the Planning Sector of the MWRI. The EDP findings should be incorporated in the currently revised National Water Resources Plan in such a way as to guide further water resources development in Eastern Desert region of Egypt.

- A joint proposal could be made regarding further cooperation between Cairo University, supported by UNDP, and the World Food Programme. The proposal should be submitted to both the MWRI and MALR with a request for joint financing from these two, and perhaps other ministries. This is a recommendation of the leader of the WFP project “Development of Bedouin Communities”.

6. QUALITY OF THE TERMINAL EVALUATION REPORT

6.1 Comments on the summary of project ratings and terminal evaluation findings based on other information sources such as GEF EO field visits, other evaluations, etc.

Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to document GEF Office of Evaluation Guidelines for terminal evaluations review for further definitions of the ratings. Please briefly explain each rating.

6.2 Quality of the terminal evaluation report	Ratings
a. To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? The TE assesses all the project outputs even though it does not sufficiently describe them.	4
b. To what extent the report is internally consistent, the evidence is complete/convincing and the IA ratings have been substantiated? Are there any major evidence gaps? The terminal evaluation is internally consistent. Some of the ratings appear to be higher than what was actually achieved.	4
c. To what extent does the report properly assess project sustainability and /or a project exit strategy? The project assesses project sustainability and its risks.	5
d. To what extent are the lessons learned supported by the evidence presented and are they comprehensive? Lessons learned are comprehensive	5
e. Does the report include the actual project costs (total and per activity) and actual co-financing used? The project does not include actual project costs and cofinancing.	2
f. Assess the quality of the reports evaluation of project M&E systems? Although there is a section on M&E, the information does not seem to be sufficient to assess the quality of M&E system	3

7. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.
Response to comments provided by GEFSEC in correspondence of 28 September 2000