# **GEF EO Terminal Evaluation Review – Project ID 1707**

1. PROJECT DATA				
			Review date:	01/12/2010
GEF Project ID:	1707		at endorsement (Million US\$)	at completion (Million US\$)
IA/EA Project ID:		<b>GEF financing:</b>	0.55	0.49
Project Name:	Integrated Management of Cedar Forests in Lebanon in Cooperation with other Mediterranean Countries	IA/EA own:	0.03	UA
Country:	Lebanon	Government:	0.32	UA
		Other*:	0.48	UA
		Total Cofinancing	0.83	UA
Operational Program:	OP 3: Forest Ecosystems	Total Project Cost:	1.36	UA
IA	UNEP	<u>Dates</u>		T
Partners involved:	FAO; Ministry of Environment, Lebanon; American	Effectiveness/ Pro	June, 2004	
	University of Beirut; Other countries (Algeria, Cyprus, Morocco and Turkey)	Closing Date	Proposed: June 2007	Actual: December 2007
Prepared by:	Reviewed by:	Duration between	Duration between	Difference between
Rajesh Koirala	Neeraj Negi	effectiveness date and original closing (in months): 36	effectiveness date and actual closing (in months): 42	original and actual closing (in months):
Author of TE:		TE completion date:	TE submission date	Difference between
Fady R. Asmer		September 2008	to GEF EO: November 2008	TE completion and submission date (in months): 2 months

<sup>\*</sup> Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

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

<sup>2.2</sup> Should the terminal evaluation report for this project be considered a good practice? Why?

Yes. Although the terminal evaluation report does not provide adequate information on some aspects such as cofinancing and exit strategy, it should still be considered a good practice because it assesses level of achievement against each objective and gives lessons and recommendations learnt from the project. 2.3 Are there any evaluation findings that require follow-up, such as corruption, reallocation of GEF funds, mismanagement, etc.?

No such instances are found 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 appraisal document, the objective of the project was to "development of an action plan for integrated management of forests including assessment of insect infestation in cedar forests in the Mediterranean region with particular emphasis on the Tannourine-Hadath El-Jebbeh cedars forest."

There was no change in the objective 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)?)

The project appraisal document does not mention a specific development objective other than the overall project objective. This is an output oriented project, and as mentioned in the document, the project intends to achieve following five outputs:

- 1. "Development of an action plan for integrated sustainable management of cedar forests in the region using the Tannourine forest as a case example and addressing various threats to the forest ecosystem."
- 2. "Study of the various factors that caused the *Cephalcia* outbreak in Lebanon."
- 3. "Level of risk from Cephalcia attack is assessed for cedar forests in the Mediterranean region."
- 4. "Promoting the use of new monitoring tools in detecting insect outbreak and developing and utilizing alternative methods for the control of *Cephalcia* to replace compounds that are not environmentally friendly."
- 5. "Increased institutional and community knowledge exchange, education and capacity building for the management of cedar forests."

According to the terminal evaluation there was no change in the output during implementation.

Overall Environmenta Objectives	Environmental Objectives		Project Components		Any other (specify)	
c. If yes, tick a objectives)	pplicable reasons for the	change (in g	lobal environm	nental objective	s and/or development	
Original objectives not sufficiently articulated	Exogenous conditions changed, due to which a change in objectives was needed	tions changed, restructions changed, because in objectives objectives		Project w restructur because o lack of progress	red (specify)	

#### 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: S

Based on the information provided in the project document, the project is relevant to the GEF Operational Program 3 (Forest Ecosystems). Lebanon ratified the Convention on Biological Diversity in 1994. Recognizing the national significance of cedar forests, the Government of Lebanon has established Tannourine Cedar Forest Nature Reserve for better protection.

b. Effectiveness Rating: S

According to the terminal evaluation, the project was able to attain all intended outputs except one. It completed an integrated management plan for cedar forests, assessment of Cephalcia both in Lebanon and Mediterranean region, and capacity building activities, but it did not complete the testing of synthesized pheromones and the fungus for biological control of Cephalcia. Details of the expected outputs and actual achievements of the project are presented below:

Management plan for cedar forests prepared: A Management Plan for the integrated sustainable management of

cedar forests of the Tannourine Nature Reserve is completed and approved by the Project team and the Lebanese Ministry of Environment. Identifying challenges and opportunities at the reserve, the plan offers specific actions for high level of protection, conservation, rehabilitation and management of biodiversity, habitats and natural processes to complement the ongoing work on controlling the insect pest.

Cephalcia outbreak assessed: A study showed that Cephalcia has spread only in the Tannourine and Bcharreh forests of Lebanon. Cephalcia attack in cedar forests of the Mediterranean region (Algeria, Cyprus, Morocco and Turkey) does not exist. The study aiming at finding the causes of insect outbreak identified two reasons (1) increase soil and air temperature and decrease humidity, and (2) reduced grazing animals in the forest (animals' trampling would disturb the insect lifecycle and control the insect population).

**Controlling the insect outbreaks:** To use in monitoring and controlling the insect, the project aimed at determining the chemical composition of Cephalcia pheromone and synthesizing it. In cooperation with a research team of France, the nature of the pheromone has been identified, but the testing of the synthesized product is in progress. Similarly for biological control, laboratory research has confirmed that *Beauvaria* fungus can be used to control the Cepphalcia. However, its efficacy under natural condition in the forest is yet to be determined.

Capacity building and increased awareness: Because of the collaborative nature, the project strengthened the relationship between the ministry and the university within Lebanon, and among universities and government of four neighboring countries (Algeria, Cyprus, Morocco and Turkey). This relationship could be useful for future initiatives. The project granted fellowship for four graduate students to study forest entomology, ecology, and biodiversity. However upon completion of the study only one of them had been working in, while the others were waiting for the appropriate opportunity to contribute to, the directly related field of study. Trainings to various target groups were provided on issues such as invasive species control, forest management, flora and fauna monitoring, use of GIS and GPS, use of pheromones to monitor insect populations in cedar forests, and the identification of the *Cephalcia tannourinensis*. Skills developed through training provided to survey cephalcia could be used for surveying other insects in Cyprus and Lebanon. Both of these countries did not have any entomological survey before. The project carried out public awareness initiatives about the importance of forests and biodiversity by preparing information material.

# c. Efficiency (cost-effectiveness)

Rating: MS

Although the terminal evaluation assesses the project to be highly efficient in achieving intended outcomes, it provides little evidence to support this optimistic conclusion. In contrast there are some areas where performance has not been superior. For example, as the terminal evaluation reports, although project was officially completed in December 2007, some activities such as training and capacity building were continued even until August and September 2008. The project also experienced interruption for about six months due to political factors. Moreover, the testing of synthesized pheromones and the fungus for biological control of Cephalcia was not completed by the time project was over.

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

Given the project undertook only some foundational work such as international collaboration and skill development trainings to national and local stakeholders, it is too early to assess its impacts.

**4.2 Likelihood of sustainability.** Using the following sustainability criteria, include an assessment of <u>risks</u> 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: MU

As mentioned in the terminal evaluation, although MOE has a regular budget for the nature reserve, it is barely enough to cover some basic needs, including salaries of the staff.

# b. Socio political Rating: ML

Based on the evidence presented in the terminal evaluation, it appears that the government is interested in continuing the project benefits. But the level of interest of scientists in university and local communities seems to be moderate.

# c. Institutional framework and governance Rating: L

The Tannourine Cedar Forest Nature Reserve (TCFNR) has an official status. The government has formed a committee which is responsible for implementing the management plan prepared by the project and managing the TCFNR, under the supervision of the MOE and in collaboration with AUB.

# d. Environmental Rating: L

There seem to be negligible environmental risk from the forest fire and insect outbreak.

## 4.3 Catalytic role

## a.. Production of a public good

Based on the research in the project site, two papers are published in refereed journals, three papers are presented at international scientific meetings, and four master's theses and three memoires are prepared.

#### b.. Demonstration

The project was not able to conduct demonstration activities.

### c.. Replication

According to the terminal evaluation, the government has been successful in replicating the GEF project. The government proposed, got approval for and is now implementing a three- million USD project, financed by the Fonds Français pour l'Environnment Mondial (FFEM), in two Nature Reserves of Lebanon - the Tyre Beach Nature Reserve and the Ammik Marshes.

#### d.. Scaling up

## 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?

The terminal evaluation reports the same budget as that of the project document. There is no further information on budget spent on each component and level of co-financing realized during the implementation.

According to the PIR 2007, co-financing was secured, but the payments were slow due to bureaucracy. It however did not affect on the project outcomes.

**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?

As reported in the terminal evaluation, the project completion date was revised to complete in December 2007, six months more from the original closing date. Due to the political situation of the country, the project activities were interrupted in the summer of 2006. However, according to the terminal evaluation, the project team quickly brought the project back on schedule.

**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.

The project experienced operational difficulties starting from November 2006 because of the resignation of the Minister of Environment and the resultant delays in processing of payment requests. As mentioned in the terminal evaluation, all decisions made by the Director of General of the Ministery of Environment need to be approved by the Minister for Environment. But when the minister resigned, many project related decisions were pending. To assist the project overcome this obstacle, the Prime Minister approved the project related decisions of the Director General, and the project could get back to track in April 2007

## 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): S

The project document presents the proposed M&E approach for the project in detail. It includes baseline information on specified indicators and data analysis systems. The time frame, standards for outputs and budget are also specified. The plan also mentioned the responsibilities of different stakeholders in monitoring project progress.

# b. M&E plan Implementation Rating (six point scale): S

According to the terminal evaluation an M&E plan was implemented, and it facilitated timely tracking of results and progress towards achieving objectives. PIRs provided justified ratings and guidance for the project. The information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

b.1 Was sufficient funding provided for M&E in the budget included in the project document? As mentioned in the project document, US\$ 19000 was allocated for M&E, and according to the terminal evaluation, the budget was sufficient for M&E.

b.2a Was sufficient and timely funding provided for M&E during project implementation? Unable to assess.

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?

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.

M& E system can be considered a good practice. Both the terminal evaluation and PIRs appreciate the role of M&E system in keeping track of project performance, especially speeding up or slowing down the rate of achievement for specific outputs to meet the targets.

#### 4.6 Assessment of Quality of Implementation and Execution

# a. Overall Quality of Implementation and Execution (on a six point scale): S

# b. Overall Quality of Implementation – for IA (on a six point scale): MS

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.

The project design document was clear and pragmatic. However, one of the intended activities of the project, investigation of effects of forest threats such as forest fire and overgrazing, was not carried out as these threats were considered irrelevant soon after the project began. The irrelevancy could have been identified during the planning stage. Also, as mentioned in the terminal evaluation, Cephalcia attack in Syria was not assessed because Syria was not interested in it after the project started. According to the terminal evaluation, the implementation officer of UNEP delivered efficient supervisory and administrative role. All necessary supports were timely provided. The documents to be printed were reviewed and comments were provided to the project. The terminal evaluation states that no operational and/or technical constraints, influencing the effective implementation of the project, were encountered during the implementation of the project. The PIRs report that there were "substantial risks" emanating from the project's governance structure, steering committee and other project bodies providing inadequate guidance to the project. These risks were not addressed. However, as mentioned in the PIRs since the project governance bodies fulfilled their TOR and commitment, the risks were not critical for achieving the project outputs.

# c. Quality of Execution – for Executing Agencies<sup>1</sup> (rating on a 6 point scale): S

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.

According to the terminal evaluation, the executing agency (the Ministry of Environment and American University of Beirut) correctly managed and transparently accounted for utilizing GEF resources. As mentioned in the PIR 2006, PIR 2007, and PIR 2008, the project had substantial risk on governance structure because steering committee and other project bodies were inadequately providing guidance or input to the project. Since this was reported as substantial risk in all three PIRs, it seems that executing agency was unable to address it. As presented in the PIRs, all other risks were negligible. The terminal evaluation and PIRs acknowledge that some stakeholders (community members and local politicians) were not in favor of the project at the beginning, but in due course of time the executing agency was able to win their support. PIR 2007 mentions that project reports were submitted on time.

# 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 could have application for other GEF projects

The terminal evaluation mentions following three lessons:

- 1. Awareness raising activities and field visits to school children contribute to increase the ownership of the local populations and to sensitize youths to the environmental issues.
- 2. The negative attitude of some stakeholders at the beginning of the project may change during the course of the project if they are approached positively and appropriate trainings and awareness raising activities are implemented.

# b. Briefly describe the recommendations given in the terminal evaluation

The terminal evaluation recommends:

- 1. To conduct further studies on forest history and insect outbreak pattern in the past by using dendrochronolgy and tree ring analysis.
- 2. To provide broader trainings on food processing and home based food industries to local women groups to produce products that have good market
- 3. To distribute extension materials more widely and more efficiently among all level of government agencies, NGOs, universities, private companies and so on.
- 4. To employ the professionals trained by the project in a most directly relevant institutions or organization of their study.

## 6. QUALITY OF THE TERMINAL EVALUATION REPORT

<sup>&</sup>lt;sup>1</sup> 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.

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	S
the project and the achievement of the objectives?	
The report presents an assessment of all relevant outcomes and achievement of project objectives.	
b. To what extent the report is internally consistent, the evidence is complete/convincing and	S
the IA ratings have been substantiated? Are there any major evidence gaps?	
The report is consistent and evidence presented is complete.	
c. To what extent does the report properly assess project sustainability and /or a project exit	MS
strategy?	
The terminal evaluation properly assesses project sustainability, but it does not touch on project	
exit strategy.	
d. To what extent are the lessons learned supported by the evidence presented and are they	MS
comprehensive?	
The terminal evaluation provides four lessons, and half of them are supported by evidences.	
e. Does the report include the actual project costs (total and per activity) and actual co-	U
financing used?	
The terminal evaluation includes total funding received from UNEP/GEF (as of Dec. 2007), but it	
does not include per activity actual cost and actual co-financing (total and per activity).	
f. Assess the quality of the reports evaluation of project M&E systems?	S
The report includes an assessment of the quality of the M&E plan at entry and the M&E system	
used during the implementation.	

7. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.