GEFM&E Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	9/8/05
GEF ID:	518		at endorsement (Million US$)	at completion (Million US$)
Project Name:	Emergency Response to Combat Forest Fires in Indonesia to Prevent Haze in South East Asia	GEF financing:	0.750	0.750
Country:	Indonesia	Co-financing:	6.00	0.100
Operational Program:	STRM	Total Project Cost:	$6,750	$0.850
IA	UNEP	Dates		
Partners involved:	Association of South East Asian Nations (ASEAN) / Asian Institute of Technology (AIT)	Work Program date		April 1998
		CEO Endorsement		July 1998
		Effectiveness/ Prodoc Signature (i.e. date project began)		July 1998
		Closing Date July 2003	Proposed: July 2003	Actual: October 2003
Prepared by: Lee Alexander Risby	Reviewed by: David Todd	Duration between effectiveness date and original closing: 5 years	Duration between effectiveness date and actual closing: 5 years and 3 months	Difference between original and actual closing: 3 months
Author of TE: Peter Moore		TE completion date: December 2003	TE submission date to GEF OME: 11/2/04	Difference between TE completion and submission date: 11 months

2. SUMMARY OF PROJECT RATINGS

GEFME Ratings for project impacts (if applicable), outcomes, project monitoring and evaluation, and quality of the terminal evaluation: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU), not applicable (N/A) and unable to assess (U/A). GEFME Ratings for the project sustainability: Highly likely (HL), likely (L), moderately likely (ML), moderately unlikely (MU), unlikely (U), highly unlikely (HU), not applicable (N/A), and unable to assess (U/A).
Please refer to document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. OED)	GEFME
2.1 Project impacts	**N/A**	**N/A**	**N/A**	**N/A**
2.2 Project outcomes	**S**	**MU (4)** (This was corrected from S (3) on 3/13/06)	**N/A**	**U**
2.3 Project sustainability	**N/A**	**L (2)**	**N/A**	**MU**
2.4 Monitoring and evaluation	**N/A**	**S (3)**	**N/A**	**UA**
2.5 Quality of the	**N/A**	**N/A**	**N/A**	**U**

evaluation report				

Should this terminal evaluation report be considered a good practice? No Why? It does not contain sufficient analysis of sustainability, cost effectiveness and monitoring and evaluation.

3. PROJECT OBJECTIVES, EXPECTED AND ACTUAL OUTCOMES

3.1 Project Objectives

- **What are the Global Environmental Objectives?**

To prevent and reduce risk of forest fires in Indonesia therefore protecting biodiversity and carbon sink functions

- **Any changes during implementation?**

No

What are the Development Objectives?

To develop a national and regional strategy and adopt appropriate concrete measures to combat forest fires, including the establishment of an early warning system, building on existing capacities. More specifically, the project aims at providing the technical assistance required to extinguish the forest fires, with a view to enhancing the national and regional fire fighting capacities by coordinating all efforts to provide the available state-of-the-art technologies and techniques so as to mitigate against the irreversible and irretrievable loss of biodiversity and loss of carbon sinks.

- **Any changes during implementation?**

No

3.2 Outcomes and Impacts (rated as 3 overall but no explanation of rating scale)

- **What were the major project outcomes and impacts as described in the TE?**

Outcome 1: Coordination of all existing efforts (not rated)

The TE stated meetings of experts on fire-fighting were undertaken to discuss the long term programs for responding to Indonesian fire emergencies. A fire management plan was developed but it was unrealistic and expensive (cost US$9.7 million). Experience from other countries has shown that it is on-the-ground forces at the mid-level management that need to be involved / and where most resources are needed for planning and management. The responses have not involved ground forces or equipment. It is not clear that a set of ideas or follow up to meetings has been developed over the course of the project. Donors meeting were carried out and the need to take appropriate steps with respect to national land policies and clearing were outlined.

The TE comments that the lead that was initially taken by UNEP on behalf of the UN system does not seem to have been sustained. The initial pulse of activity in Geneva does not appear to have generated an ongoing effort by UNEP on fires at the global level and it appears the outcomes of the meetings held in Geneva, if still appropriate, remain to be carried forward. Within South East Asia there has been an ongoing involvement under the UNEP GEF project that has seen UNEP active in fire issues and aspects for the region. There remains a need for international level interaction and focus on fires to be coherent. The recent International Wildland Fire Conference held in Sydney, Australia has recognised this and delegates are attempting to work collectively to raise the issue and work towards improvement through a series of regional consultations and events in the medium to longer term.

Outcome 2: Establishment of early warning system (Not rated)

The TE commented that the capacity for emergency response was assumed in the project document. It seems to have been anticipated that with clear data collected and corroborated by both aerial and other means that a key aspect of fire preparedness would be actively addressed, enabling fires to be put out quickly. This was not possible since the capacity needed was not available and what existed was generally disorganised. Additionally, the cost of aerial surveillance was very high and despite the preparation of a standard operating procedure for carrying out fire spotting and confirming satellite data there resources did not exist to continue the work. To date there has not been a repeat of aerial surveillance although some flights are conducted for investigation and assessment, not only for fires but other aspects of land use and management. The process of setting up and conducting the aerial surveillance was well managed and documented. There are some interesting conclusions and insights that arise from the work undertaken. Central among them is the information that 82% of hotspots were confirmed as fires and some fires did not appear as hotspots.

A GIS database was created – although this took longer than expected due to technical / logistical difficulties involved in collecting and sourcing data for the 'layers'. By 2003 GIS database was in use and was being used by other donor initiatives (notably the EU) to feed into more initiatives to prevent fires. The TE states: That work assisted in a number of ways:

- The connections established through the GIS development enabled work on this concept to be based on clearer understanding and awareness of the different perspectives.
- The technical competence developed during the GIS database
- The thinking evolved on the topics of appropriate layers of information, the interaction between them and the linkage of different information in ways that are productive and useful for fire management.

However, overall the outcome has not been achieved by the closure of the project. There are some circumstances that contributed to this.

- The activity is very generally identified in the project document and assumed local capacity to assess fire risk. This was not present and could not be developed in the time available with the resources at hand.
- The Aerial Surveillance work identified some key aspects that made Early Warning difficult:
  - Communication of basic data and information to the local level was difficult, often impossible, and slow
  - Capacity to act on the data received was at best patchy and often non-existent
- Prior to the completion of the GIS database development the Canadian International Development Agency (CIDA) had initiated a Southeast Asia Fire Danger Rating Project (SEAFDRS) that was designed to create an early warning system at regional level with pilot sites in Indonesia. Consequently the early warning system was initiated also through ASEAN and considered the information and data provided by the UNEP/GEF in its development.

Outcome 3: Training and Capacity Building (Not rated)

Subregional (Borneo) Training workshop of Trainers in Forest Fire Fighting

The TE comments that this training workshop was run in October 1999. The course was conceived as an instructor's course in fire fighting and management to be conducted over two weeks intended as a hands on simulation exercise by the provider (New South Wales Rural Fire Service from a province of Australia). For reasons that are not clear the workshop duration was reduced to three days only. This had a negative effect on the training quality and outcomes compared to what might have been achieved under the original concept. There was also significant reduction in impact arising from an inappropriate mix of staff sent to attend by the agencies and governments of the region. Some attendees expected to learn fire management; others to learn how to train in fire management and still others advanced fire management. The attendees were from different levels of their respective organisations and this created a range of tensions and difficulties to be managed. The expectation and the range of participants necessitated the course being adapted and altered from the original intent. The material covered was appropriate and consisted of core information and technical understanding for fire fighting. It is not clear from the report that the participants were properly trained to train, nor if upon return to their home nations training courses were presented by the participants. In most cases the participants did not hold training responsibilities or positions. This activity was not as useful or productive as it could have been had there been better selection of participants and more balanced training design.

The TE comments that one of the most effective ways to build capacity is generally considered to be to train trainers in the field of interest and for those trainers to then provide capacity building through training and development in their home agencies and nations. This approach provides both adaptation to national context and training delivery by locally aware and experienced trainers. The concept is appropriate and in the absence of a regional training centre for fire management or a mechanism for regular and frequent interaction among fire management staff from agencies and nations the best option available. It harnesses the value of interaction between technical and management staff around the issues of fire management and takes advantage of gathering together people with similar roles and levels in their institutions. Due to the reduction in time as against the preferred course length and the selection of some inappropriate staff to attend the benefits of this approach were not realised.

Immediate Action Plan Development and Field Training Exercise Sumatra

The TE comments that the IAP was felt to have been well implemented with prevention messages being put out through the media, cassettes, a brochure with fire information for shifting cultivators, local people and the private sector and prevention messages on radio and posters. The materials were also distributed to five other provinces that were fire prone; North Sumatra, Jambi, Lampung, West and Central Kalimantan. This was identified as one of the first efforts to provide coordination and structure.

The activity was considered very positive since it moved the focus from fire as an “event” to fire as a result of various influences that required consistent monitoring and management. The IAP was noted as the influence that “triggered” a more measured approach to planning and review to prevent, prepare and manage fires. Prior to the IAP no standard guidelines for dealing with fires had existed.

The training for motivators was noted by the TE as being good, however it was also noted that there was need for both further training and more people to be trained, for which funds would be needed. The IAP was piloted in four districts initially with one additional district undertaking its own Immediate Action Plan after an IAP workshop district representatives attended. The IAP was noted as a good activity that should be duplicated elsewhere in other districts but that for this funds would be required. Without additional funding, from Indonesian or other sources, there has been no further activities, initiated locally or externally, building on the training exercise and the IAP.

Training Course for Investigators and Prosecutors

This course was run at the Environmental Institute of Malaysia (EiMAS) and was prepared and presented by experts in law, investigation and prosecution from Malaysia. Indonesia sent representatives from North Sumatra, Riau, West Kalimantan, the BAPEDAL and Ministry of Forestry. The content of the course was heavily influenced by Malaysian experience and legislation. This meant it was felt to be less useful and directly applicable to the Indonesian representatives although some aspects were worthwhile. For example the enforcement processes in Indonesia vary from those in Malaysia and there is merit in preparing and conducting a course in Indonesia using local material and instructors. There was no clear next step for this activity in the Indonesian context. There are specific technical activities for fire investigation and analysis that are applicable to all fire investigation courses that are generic and could be used in any national context. In this course it seems there were no such technical elements prepared and delivered.
There was no reported improvement or application of the information and skills from the course being applied. The TE noted that the systems differ, only nine were trained for Indonesia and it has been only twelve months since the training.

Establishment of Independent Community Groups at Village Level

Accordingly it was identified by the TE that a pilot of establishing an independent community group would be undertaken in a critical area. The two locations selected were Rasau Jaya Umum and Rasau Jaya III Village. The Rasau Jaya area is on peat soils and close to the airport for Pontianak the provincial capital. The smoke creates both a health and safety hazard for the local people as well as disruptions to air traffic along with the impacts across national boundaries.

The TE noted that this activity has been very successful. Enthusiasm and comprehension among the people for improving the circumstances of local people and reducing the use of fire in agricultural practices. The two methods used to control fire were effectively socialised, with awareness raised and monitoring and implementation put in place. Firstly the approach to current fire use and management techniques was documented. Two fire teams of 30 people each were set up to raise awareness, monitor and implement change. Since then three additional teams have been formed spontaneously by the community. Communities have become very aware of local, regional and international implications of fires. The interest and enthusiasm was high. Officials noted that across the area the socio-economic conditions and circumstances are similar so extending the efforts and findings more widely should be straightforward. Some traditional methods have been changing but this activity has confirmed that old ways were more effective and have been re-invigorated by this activity. The uncontrolled burning that continues is usually taking place on land that was not clearly “owned” or under specific management, known as “lahan tidur”.

Development of Guidelines for the Implementation of the Policy on Zero Burning

The TE notes that the guidelines contained little information on the practices best applied to conversion of secondary or logged forest to plantation to other uses without fire. For the Indonesian context this is problematic where a significant amount of land clearing is still being undertaken and planned. In the Borneo provinces of Malaysia this is also the case.

Development of Guidelines for the Implementation of the Controlled Burning Practices

The TE noted that Indonesian Regulation No. 4/2001 is set out to regulate the use of fires and bans fire use. There is a shortcoming since the regulation doesn’t accommodate the non-commercial burning, or rotational burning, that is conducted by people to sustain livelihoods. This needs to be allowed but also regulated. The guidelines are intended to provide guidance, technical information and basic understanding to support effective and efficient fire use where it is necessary for the smallholders and subsistence.

The intention of preparing these guidelines is both to recognise the need, and the lack of alternatives, for some segments of society to use fire in annual cycles that sustain their livelihoods and to provide guidance in those situations where fire is used such that it is used as effectively as possible and 'managed'. The local level is a logical point for both prevention and management of fires to be instigated and invigorated for not only Indonesia but also all nations in the region.

Southeast Asia Fire and Haze Information Centre

One logical need that is to be met if the exchange of information is to be streamlined and improved is the development of an "information-clearing house". This concept has been under consideration for some time and is an integral part of the ASEAN Agreement on Transboundary Haze Pollution. Support from the UNEP GEF project, savings as a result of efficiencies elsewhere in the implementation, are to be used to further develop this concept for South East Asia and initiate a test of a possible web-based platform for the information centre.

Outcome 4: Public awareness and dissemination (Not rated)
The TE noted that while there was not a specific activity on public awareness, the projects, such as the IAP Phase 1 and the community-based project in West Kalimantan, did include components of public awareness activities at the local levels. The ASEAN Haze Action Online is also a public awareness activity, at the national and regional levels, and the GEF/ UNEP project has contributed to improving the content and display of the website through the capacity development programme for the ASEAN Coordination and Support Unit. A number of products such as posters, radio campaign materials and leaflets were produced during the IAP project. Upon the completion of the IAP project, designs and themes for the posters, have been replicated by the Indonesian government (Ministry of Environment), produced in other forms of materials for public awareness and continue to be used.

4. GEF OFFICE OF M&E ASSESSMENT

4.1 Outcomes and impacts **Rating: U**

A Relevance

- **In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies? Explain**

The project consistent with the Short-Term Response Measures (STRM) funding window. However, it failed to produce significant positive sustainable outcomes particularly in the areas of capacity building, co-operation. The project design contained several flawed assumptions (although this was mainly due to the very quick preparation). The TE states:

In the rationale used to develop this project it was assumed that fire fighting, capacity for it, structure, skills, equipment and organization, were a key factor in the extent and persistence of the fires. Subsequently it has been established that while fire suppression capacity does indeed need improvement, the level of it is not at the root of the fire "problem", the problem definition for this design was inadequate. The design of this project was quite general and did not provide significant clear guidance for activities and implementation.

B Effectiveness

- **Are the project outcomes as described in the TE commensurable with the expected outcomes (as described in the project document) and the problems the project was intended to address (i.e. original or modified project objectives)?**

The TE indicates that the project failed to fully achieve many of its outcomes and sustainability is doubtful – many of the activities require further funding which may not be forthcoming. Shortcomings were reported in co-operation / coordination at national and international level, and in the capacity building exercises for fire control, management and planning. The project was satisfactory in its approach at the local and community scale – where awareness had been raised and communities in pilot areas were reviving customary fire control practices. This approach has potential for cost-effective replication as it is tied in with local governance and resource management issues. However, the project did not devote enough resources or time to appropriate community-based solutions.

C Efficiency (cost-effectiveness)

- **Include an assessment of outcomes and impacts in relation to inputs, costs, and implementation times based on the following questions: Was the project cost – effective? How does the cost-time Vs. outcomes compare to other similar**

projects? Was the project implementation delayed due to any bureaucratic, administrative or political problems?
The project was not cost effective. Significant resources were allocated for meetings, workshops and training which later proved to be ineffective. The project did not address underlying causes of the fires (which are at the local level) until late in the project – the design was essentially reactionary and focused on 'fire fighting / control and planning' – Perhaps the only part of the project that was relative cost effective was the work at local government and community level – which did get to the root causes of fire management – land management / policy and governance.

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of project sustainability based on the information presented in the TE.

A Financial resources	Rating: U
The TE noted that much money was spent on devising plans which are expensive to implement; on technical monitoring such as aerial surveys and GIS which are expensive to operate; on training that was insufficient or of questionable quality and relevance. Finally, the TE states in several sections that further funds are required and without the funds training and / or activities are unsustainable. Therefore, financial sustainability must be rated 'unlikely'	
B Socio political	**Rating: ML**
The TE noted that the project component which focused on communities and local government capacity building and awareness raising was the most successful. Local government and communities have been made aware of the fire problems, causes and have developed some solutions – such as the return to customary / traditional land management / fire control methods etc. In the areas where the project has work sustainability is moderately likely.	
C Institutional framework and governance	**Rating: MU**
Based on information presented in the TE the community / local government level sustainability is moderately likely (see above A). However at other institutional levels capacity building has been poor in several respects – plans and training are expensive and were often not tailored to the local context. Technical decision-making tools such as GIS and aerial surveys have proved to be expensive and are not likely to feed into institutional decision-making without further external assistance. Lastly, co-operation at national and international level has been weak with little follow up to the initial burst of interest in the fires. The overall rating is moderately unlikely.	
D Ecological (for example, for coffee production projects, reforestation for carbon sequestration under OP12, etc.)	**Rating: N/A**
It is not possible to accurately evaluate the ecological sustainability (in terms of biodiversity and carbon sequestration). The TE provides very little information on on-the ground environmental outcomes. The TE states that at best the outcomes are 'indirect'.	
E Examples of replication and catalytic outcomes suggesting increased likelihood of sustainability	**Rating: N/A**
The community / local government based approach to addressing underlying causes of burning / fires in rural areas around the forest edges has the potential to be replicable. However, the TE gives no indication that replication is planned beyond a recognition of a potential – hence a rating cannot be given.	

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

A. Effective M&E systems in place: What were the accomplishments and shortcomings of the project's M&E system in terms of the tools used such as: indicators, baselines, benchmarks, data collection and analysis systems, special studies and reports, etc.?	Rating: UA
The TE does not adequately assess the project M&E systems. Therefore, it is impossible to adequately assess the M&E systems.	
B. Information used for adaptive management: What is the experience of the project with adaptive management?	**Rating: MS**
Based on information provided by the TE under implementation the project went someway to correcting the design errors that were caused by the relatively rapid design process (e.g., the focus on fire control / technical issues) and to focus to some extent on underlying socio-economic and institutional causes. Therefore adaptive management is rated 'marginally satisfactory'	
Can the project M&E system be considered a good practice? No	

4.4 Lessons
Project lessons as described in the TE

What lessons mentioned in the TE that can be considered a good practice or approaches to avoid and could have application for other GEF projects?
The TE provides lessons that are focused on fire / haze problem and are not generally transferable to other GEF projects: Implicitly the lessons do emphasize: • The need for better donor / country coordination and ownership (particularly relevant to quickly developed STRM activities); • Need for consistent and clear communication between project stakeholders; • More detailed project problem analysis at the beginning to ensure underlying causes are being addressed as opposed to symptoms

4.5 Quality of the evaluation report 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 the "Criteria for the assessment of the quality of terminal evaluation reports" in the document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

4.5.1 Comments on the summary of project ratings and terminal evaluation findings
In some cases the GEF Office of M&E may have independent information collected for example, through a field visit or independent evaluators working for the Office of M&E. If substantial independent information has been collected, then complete this section with any comments about the project.
The ratings given by the TE are inconsistent and confusing – scores are given with no indication of what they mean.

4.5.2 Quality of terminal evaluation report	**Ratings**
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? Yes, but the ratings given are not clearly explained or justified by the text which is at times contradictory.	3
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated? No, the text and ratings are contradictory	2
C. Does the report properly assess project sustainability and /or a project exit strategy? No, the TE did not comment on an exit strategy or in detail on various sustainability issues.	1
D. Are the lessons learned supported by the evidence presented and are they comprehensive? Yes, but lessons are to a great extent too specific and in some cases were not adequately linked to the description of outcomes (findings).	3
E. Does the report include the actual project costs (total and per activity) and actual co-financing used? No	1
F. Does the report present an assessment of project M&E systems? No it does not present a detailed assessment of M&E systems	2

4.6 Is a technical assessment of the project impacts described in the TE recommended? Please place an "X" in the appropriate box and explain below.	**Yes:**	**No:X**
Explain: The projects small investment does not justify a technical assessment of impacts at a later date.		
Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.? No		

4.7 Sources of information for the preparation of the TE review in addition to the TE (if any)

N/A